ENVIRONMENTAL PROTECTION AGENCY

40 CFR Part 52

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Approval and Promulgation of Implementation Plans; Texas; Ozone; Beaumont/Port Arthur Ozone Nonattainment Area

AGENCY: Environmental Protection Agency (EPA).

ACTION: Final rule.

SUMMARY: The EPA is approving the Texas 1-hour ozone attainment demonstration State Implementation Plan (SIP) for the Beaumont/Port Arthur (BPA) moderate ozone nonattainment area. The attainment demonstration SIP is addressed in the State of Texas submittals dated November 12, 1999 and April 25, 2000. In approving the attainment demonstration, EPA is: extending the ozone attainment date for the BPA ozone nonattainment area to November 15, 2007 while retaining the area's current classification as a moderate ozone nonattainment area; approving the State's enforceable commitment to perform a mid-course review and submit a SIP revision to the EPA by May 1, 2004; finding that the BPA area meets the Reasonably Available Control Technology (RACT) requirements for major sources of volatile organic compounds (VOC) emissions; and approving the motor vehicle emissions budgets (MVEB). A notice of proposed rule making was published on this action on December 27, 2000 (65 FR 81786). EPA received comments on that proposal. EPA has also received comments on two related proposed actions: the "Extension of

Attainment Dates for Downwind Transport Areas," 64 FR 12221 (March 25, 1999); and, the proposed rulemaking published on April 16, 1999 (64 FR 18864), which addressed the Clean Air Act reclassification or eligibility for extension of attainment date for the BPA area. In this action, EPA responds to the comments to all three of these documents. For details on the SIP submittals and the EPA analysis of the submittals, refer to the December 27, 2000 proposed rule.

DATES: This final rule is effective on [FEDERAL REGISTER OFFICE:

Insert date 30 days from date of publication in the Federal

Register].

ADDRESSES: Copies of documents relevant to this action are available for public inspection during normal business hours at the Environmental Protection Agency, Region 6, Air Planning Section (6PD-L), 1445 Ross Avenue, Dallas, Texas 75202-2733; and, the Texas Natural Resource Conservation Commission, Office of Air Quality, 12124 Park 35 Circle, Austin, Texas 78753.

FOR FURTHER INFORMATION CONTACT: Steven Pratt, Air Planning Section (6PD-L), 1445 Ross Avenue, Dallas, Texas 75202-2733. Telephone Number (214) 665-2140, e-Mail Address: pratt.steven@epa.gov.

SUPPLEMENTARY INFORMATION: Throughout this document "we," "us," and "our" means EPA. This supplementary information section is organized as follows:

- I What Texas SIP revisions are the topic of this action?
- II What previous actions have been taken regarding BPA attainment demonstrations and attainment dates?
- III What Motor Vehicle Emissions Budgets are we approving?
- IV What are the requirements for full approval of the attainment demonstration?
- V How did Texas fulfill these requirements for full approval?
- VI What SIP elements did EPA need to take final action on before approval of the attainment demonstration could be granted?
- VII Implementation of Reasonably Available Control Measures.
- VIII What comments were received on this proposed approval, and the two related actions, and how has the EPA responded to those?
- IX EPA Action
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I. What Texas SIP revisions are the topic of this action?

The Texas Natural Resource Conservation Commission (TNRCC) made two submittals to us, which concern the ozone attainment demonstration, and an extension of the attainment date for the BPA ozone nonattainment area:

(a) A November 12, 1999, submission from the Governor of

Texas, which included the following:

- A. Regulations and associated documentation for the control of VOC emissions from batch process operations and industrial wastewater treatment processes, intended to fulfill the remaining VOC RACT requirements of section 182(b)(2) of the Act for the BPA moderate nonattainment area;
- B. A regulation and associated documentation for the control of NOx emissions from lean burn engines, intended to meet the remaining NOx RACT requirements of section 182(b)(2) of the Act for the BPA moderate nonattainment area;
- C. Photochemical Modeling demonstration and its accompanying control strategy to bring the BPA area into attainment of the one-hour ozone standard as expeditiously as practicable, but no later than 2007;
- D. 2007 motor vehicle emissions budgets for transportation conformity;
- E. Emissions growth estimates and an emissions inventory; and,
- F. An enforceable commitment to submit additional rules to us in accordance with its modeled control strategy. (This was accomplished with the April

25, 2000, submittal - see below)

- (b) An April 25, 2000, submission from the Governor of Texas, which included the following:
 - A. Beyond RACT NOx emissions specifications in the BPA area for electric utility boilers, industrial, commercial or institutional boilers, and certain process heaters, relied upon for attainment in the BPA area;
 - B. Additional regional rules and orders relied upon for demonstrating attainment in the BPA area;
 - C. A Revised Photochemical Modeling demonstration and emissions growth estimates; and,
 - D. An enforceable commitment to perform a mid-course review with submittal to the EPA by May 1, 2004.

The TNRCC held a public hearing on the November submittal on August 9, 1999. This submittal was formally adopted by the TNRCC on October 27, 1999. The TNRCC held ten public hearings on the April submittal; a public hearing was held in the BPA area on January 31, 2000. The TNRCC formally adopted the April 25, 2000, submittal on April 19, 2000.

II. What previous actions have been taken regarding BPA attainment demonstrations and attainment dates?

On April 16, 1999, EPA proposed in the Federal Register to reclassify the BPA area to a serious ozone nonattainment area, and alternatively, proposed to extend the BPA area's attainment date if the State submitted a timely SIP meeting the criteria of the 1998 Transport Policy (64 Federal Register 18864).

The BPA Attainment Demonstration SIP revision was adopted by the State on October 27, 1999 and submitted to EPA under a cover letter from the Governor dated November 12, 1999. This submittal was termed by the State as "Phase I" of their NOx rulemaking activities. The State submitted a revision to their SIP dated April 25, 2000, as "Phase II" NOx rules and controls needed for attainment. We proposed approval of these SIP revisions in a notice of proposed rulemaking (NPR) published on December 27, 2000 (65 FR 81786). EPA received comments on that proposal. EPA has also received comments on two related proposed actions: the "Extension of Attainment Dates for Downwind Transport Areas" 64 FR 12221 (March 25, 1999); and, the proposed rulemaking published on April 16, 1999 (64 FR 18864) which addressed the Clean Air Act potential reclassification or eligibility for extension of attainment date for the BPA area. In this action, EPA responds to the comments to all three of these documents.

III. What Motor Vehicle Emissions Budgets are we approving?

Texas has submitted motor vehicle emissions budgets for the 2007 attainment year for the BPA ozone nonattainment area. The emission budgets are shown in Table 1.

Table 1. BPA 2007 Attainment Motor Vehicle Emissions Budgets

POLLUTANT	2007 TONS/DAY
VOC	17.22
NOx	29.94

We are approving these MVEBs in this action. These MVEBs are approvable as they are consistent with the control measures in the SIP, and the SIP as a whole demonstrates attainment.

IV. What are the requirements for full approval of the attainment demonstration?

In the April 16, 1999, notice we proposed to find pursuant to section 181(b)(2) of the Clean Air Act that the BPA area had failed to attain the ozone one-hour NAAQS by the date prescribed under the Act for moderate ozone nonattainment areas(i.e., November 15, 1996). Finalizing that finding, would result in the BPA area being reclassified from moderate nonattainment to serious nonattainment.

Alternatively, we proposed to extend the attainment date,

providing that Texas met the criteria of our July 16, 1998 transport policy, "Guidance on Extension of Attainment Dates for Downwind Transport Areas." If Texas submitted a SIP by November 15, 1999, that met the July 1998 transport policy, we stated we would issue a supplemental proposal in a Federal Register notice to extend the BPA area's attainment date as appropriate.

The demonstration SIP must meet applicable criteria as detailed in the Act. The specific requirements of the Act for moderate ozone nonattainment areas are found in part D, section 182(b). Section 172 in part D provides the general requirements for nonattainment plans. Refer to the December 27, 2000, supplemental proposed rule for further details of the SIP requirements.

V. How did Texas fulfill these requirements for full approval?

Texas fulfilled the requirements for full approval as follows.

Texas adopted the BPA Attainment Demonstration SIP revision on October 27, 1999 and submitted it to the EPA under a cover letter from the Governor dated November 12, 1999. This submittal was termed by the State as "Phase I" of their NOx rulemaking activities needed for attainment. The State submitted a revision to their SIP dated April 25, 2000, as "Phase II" NOx rules and

controls needed for attainment.

The State addressed the aspect of transport in accordance with our July 16, 1998 transport policy, "Guidance on Extension of Attainment Dates for Downwind Transport Areas." Texas has demonstrated that during some BPA exceedances, ozone levels are affected by emissions from the Houston/Galveston (HG) area, and that the HG area emissions affect BPA's ability to meet attainment of the 1-hour ozone standard.

Because of the uncertainty in long term projections, EPA believes a viable attainment demonstration that relies on weight of evidence (as Texas does) should contain provisions for periodic review of monitoring, emissions, and modeling data to assess the extent to which refinements to emission control measures are needed. The Texas Natural Resource Conservation Commission (TNRCC) submitted an enforceable commitment in the April 2000 SIP submittal to perform a mid-course review (including evaluation of all modeling, inventory data, and other tools and assumptions used to develop this attainment demonstration). The TNRCC committed that it will submit a mid-course review SIP revision, with recommended mid-course corrective actions, to the EPA by May 1, 2004.

On March 7, 1995, as part of our action approving VOC requirements, we found that TNRCC had implemented RACT on all major sources in the BPA area except those that were to be

covered by post-enactment Control Technique Guidelines (CTG's). 44 FR 12438 (March 7, 1995). Since that time, many expected CTGs were issued as Alternative Control Technique documents (ACTs). Of the expected CTGs and ACT's, BPA has major sources in the following categories: batch processing; reactors and distillation; industrial wastewater; and Volatile Organic Liquid Storage. EPA has approved measures as meeting RACT for the reactors and distillation and the Volatile Organic Liquid Storage categories for the BPA area. 64 FR 3841 (January 26, 1999), and 61 FR 55894 (October 30, 1996), respectively. EPA has found that the State is imposing RACT on the batch processing and industrial wastewater categories in the BPA area (65 FR 79745, December 20, 2000). While CTGs and ACTs were issued for other categories such as wood furniture coating or aerospace coating, there are no major sources in those categories in the BPA area. submitted, and EPA approved, negative declarations on these categories (61 FR 55894, October 30, 1996). There are also no other non-CTG/ACT major VOC sources in the BPA area that are not already covered by a state rule approved by the EPA as meeting RACT. Therefore, it is EPA's position that RACT is being implemented on all major VOC sources in BPA.

Finally, Texas has submitted motor vehicle emissions budgets for the 2007 attainment year for the BPA ozone nonattainment area.

VI. What SIP elements did EPA need to take final action on before approval of the attainment demonstration could be granted?

In the NPR for the Texas attainment demonstration SIP published on December 27, 2000, we stated that we could not finalize the proposed actions unless and until we approved eight Texas rules covering NOx and VOC emissions control measures relied upon by the modeled attainment demonstration for the BPA nonattainment area. These actions have been approved as detailed below.

- The NOx rules for Electric Generating Facilities in East and Central Texas (30 TAC sections 117.131, 117.133, 117.134, 117.135, 117.138, 117.141, 117.143, 117.145, 117.147, 117.149, 117.512), were approved by the EPA on March 16, 2001 (66 FR 15195);
- 2. The State-wide NOx rules for Water Heaters, Small Boilers, and Process Heaters (30 TAC sections 117.460, 117.461, 117.463, 117.465, 117.467, 117.469), were approved by the EPA on October 26, 2000 (65 FR 64148);
- 3. The revised emission specifications in the BPA area for Electric Utility Boilers, Industrial, Commercial or Institutional Boilers and certain Process Heaters (30 TAC sections 117.104, 117.106, 117.108, 117.116, 117.206 as they

- relate to the BPA area, and the repeal of sections 117.109 and 117.601 as they relate to the BPA area), were approved by the EPA on October 26, 2000 (65 FR 64148);
- 4. The administrative revisions to the existing Texas NOx SIP

 (30 TAC sections 117.101 117.121, 117.201 117.223,

 117.510, 117.520, and 117.570), were approved by the EPA on

 October 26, 2000 (65 FR 64148);
- 5. The two Agreed Orders entered into by TNRCC and Alcoa, Inc. and TNRCC and Texas Eastman, were approved by the EPA on October 26, 2000 (65 FR 64148);
- 6. Lower RVP Program in East and Central Texas (30 TAC sections 114.1, 114.301, 114.302, and 114.304 - 114.309), was approved by the EPA on April 26, 2001 (66 FR 20927);
- 7. Stage I vapor recovery Program in East and Central Texas (30 TAC sections 115.222 114.229), was approved by the EPA on December 20, 2000 (65 FR 79745); and,
- 8. VOC rules as RACT for batch processing (30 TAC sections 115.160 115.169) and wastewater (30 TAC sections 115.140 115.149), were approved by the EPA on December 20, 2000 (65 FR 79745).

VII. Implementation of Reasonably Available Control Measures.

Section 172(c)(1) of the Act requires SIPs to provide for

the implementation of all reasonably available control measures (RACM) as expeditiously as practicable and for attainment of the standard. Details of these requirements and applicable guidelines are provided in the December 2000, NPR. As discussed in the NPR, EPA reviewed the SIP submittal for the BPA area and found that it did not include sufficient discussion concerning the rejection of certain available measures as RACM for the specific BPA area. EPA reviewed potential available measures, as documented in the RACM analysis section of the technical support document (TSD) for the December 2000, NPR. EPA concludes that this additional set of evaluated measures is not reasonably available for the specific BPA area, because (a) some would require an intensive and costly effort for numerous small area sources, (b) due to the small percentage of mobile source emissions in the over-all inventory, some are not costbeneficial, and (c) since the BPA area relies in part on reductions from the upwind HG area which are substantial, and the reductions projected to be achieved by the evaluated additional set of measures are relatively small, they would not produce emission reductions sufficient to advance the attainment date in the BPA area and, therefore, should not be considered RACM.

Although EPA encourages areas to implement available measures as potentially cost- effective methods to achieve emissions reductions in the short term, EPA does not believe that

section 172(c)(1) requires implementation of potential measures that either require costly implementation efforts or produce relatively small emissions reductions that will not be sufficient to allow the BPA area to achieve attainment in advance of full implementation of all other required measures.

VIII. What comments were received on this proposed approval, and the two related actions, and how has the EPA responded to those?

EPA received comments from the public on the Notice of
Proposed Rulemaking (NPR) published on December 27, 2000 (65 FR
81786) for the proposed approval of BPA area's ozone attainment
demonstration and attainment date extension. Comments were
received from: Jefferson-Orange-Hardin Regional Transportation
Study Transportation Planning Committee; City of Nederland;
PDGlycol; Chevron Phillips Chemical Company; City of Orange;
Jefferson County Drainage District No. 6; TNRCC; Beaumont Chamber
of Commerce; City of Vidor; City of Port Neches; City of Port
Arthur; Hardin County Commissioners Court; Port Arthur
International Public Port; City of Beaumont; South East Texas
Regional Planning Commission; City of Lumberton; Commissioners
Court of Jefferson County; Orange County Commissioners Court;
Southeast Texas Environmental Managers; Entergy; South Hampton

Refining Co.; City of West Orange; Firestone Polymers; City of Pinehurst; Port of Beaumont Navigation District; Lone Star Chapter Sierra Club; and, three individuals.

EPA also received comments from the public on the proposed rulemaking published on April 16, 1999 (64 FR 18864) which addressed the Clean Air Act potential reclassification or eligibility for extension of attainment date for the BPA area. In that notice, we proposed two alternative options. One option was to find that the BPA area had failed to attain the ozone one-hour NAAQS by the date prescribed under the Act for moderate ozone nonattainment areas, or November 15, 1996. Finalizing that finding would have resulted in the BPA area being reclassified from moderate nonattainment to serious nonattainment. Alternatively, we proposed to extend the attainment date, providing that Texas met the criteria of our July 16, 1998 transport policy, "Guidance on Extension of Attainment Dates for Downwind Transport Areas."

Finally, a number of the comments received in Docket A-98-47 on EPA's notice regarding "Extension of Attainment Dates for Downwind Transport Areas" 64 FR 12221 (March 25, 1999), are relevant to this rulemaking. EPA incorporates its responses to those comments, set forth in 66 FR 586 (January 3, 2001), insofar as herein relevant. EPA sets forth responses to some of the general comments in Section A. Adverse comments as they apply

specifically to the BPA area are addressed in Section C.

The following discussion summarizes and responds to all three sets of comments.

A. Comments Received in Response to March 1999 Notice

Comment 1: EPA does not have the legal authority to extend the attainment deadline for serious areas until hoped-for NOx reductions occur from upwind states in response to the NOx SIP call and/or section 126 actions. Such an extension is not authorized by any provision of the statute. It is not within EPA's discretion to extend the attainment dates for downwind areas classified as moderate or serious. The Act does not authorize EPA to extend attainment deadlines except in certain instances. Congress provided express attainment deadlines in the Clean Air Act, and EPA is without authority to create exemptions from them. Section 181 provides the only exception to the general rule that areas must meet their attainment dates, and is the exclusive remedy. Section 181(a)(5) allows a one-year extension if the state has complied with all requirements and commitments in the applicable SIP and had no more than one exceedance in the attainment year. In section 181(a)(5), Congress provided other authority for extending attainment dates, but not to address effects of transport. See section 181(a)(5).

Section 181(b)(2)(A) requires reclassification for failure to attain by the attainment date. Section 182 requires submissions of attainment plans by the applicable attainment date. EPA's policy violates these express provisions. The statutory deadlines for attainment, the requirement that SIPs adopt measures adequate to provide for attainment by the statutory deadlines, the statutory limitation on EPA's authority to extend attainment dates under section 181(b), and the procedures to be followed in the event an area fails to attain by the deadline are unequivocal and unambiguous, and compliance is required under step one of Chevron. (The Supreme Court in Chevron detailed the process that a reviewing court must go through in determining whether an agency's construction of a statute is proper. first step is the question whether Congress' intent is clear. Ιf Congress has directly spoken to the precise question at issue, the agency must give effect to the unambiguously expressed intent of Congress. Chevron U.S.A. v. Natural Resources Defense Council, 467 U.S. 837 (1984).) The extension policy is inconsistent with sections 182(b)(1)(A), 182(c)(2)(A) and 172(c)(1), which require each nonattainment area to provide for attainment and submit SIPs providing for attainment by the applicable deadline. There is no exemption from these mandates for downwind areas that can attain through local reductions, but find it difficult to do so. The EPA policy is also inconsistent

with the Phoenix reclassification action, which stated that EPA had no flexibility to provide for attainment date extensions in that circumstance. In section 181(i) Congress refused to give EPA authority to extend attainment dates in light of reclassification. Although this comment specifically refers to attainment date extensions for serious areas, the EPA addresses it here in the context of granting extensions to moderate areas, such as the BPA area.

Response 1: The absence of an express provision in the Clean Air Act for an attainment date extension based on transport does not deprive EPA of the authority to interpret the Act to permit such an extension. Nor do the specific attainment date extension provisions in the statute preclude EPA's interpreting the statute to allow for an extension to account for upwind transport that has interfered with downwind attainment. This interpretation is necessary to prevent the thwarting of Congressional intent not to unfairly burden downwind areas. In various parts of the statute, Congress expressed an intent to accomplish this through provisions prohibiting transport, but these provisions failed to achieve the Congressional goal in time to allow the downwind areas to meet their originally prescribed attainment dates.

The provisions of section 182 governing reclassification also do not prohibit EPA from interpreting the Act to provide for

an attainment date extension based on transport. EPA's policy of extending attainment dates for ozone nonattainment areas affected by transport of ozone and ozone precursors represents a reasonable effort to avoid the frustration of Congressional intent to which a literal application of the reclassification provisions would lead. Where a "literal reading of the statute would actually frustrate the congressional intent supporting it, [a court may uphold] an interpretation of the statute more true to Congress's purpose." EDF v. EPA, 82 F.3d 451, 468 (D.C. Cir. 1996).

In 1990, Congress established a classification scheme for ozone nonattainment areas that provided for those areas to be classified on the basis of the severity of their ozone problems and for areas with more serious problems to be given more time to attain, but also required to implement more control measures. As part of these provisions, Congress enacted the reclassification provisions under which ozone nonattainment areas that failed to attain the ozone standard as of their attainment dates were to be reclassified to a higher classification, thereby receiving an extension of their attainment date, but also being subjected to additional control requirements. See section 181(b)(2).

(Phoenix was reclassified with no demonstration of transport.)

On their face, the reclassification provisions do not provide for any exemption from the reclassification process for

areas affected by ozone transport from other upwind areas. However, EPA believes that, in light of developments since the enactment of the 1990 Clean Air Act Amendments, a literal application of those provisions to such areas would frustrate broader congressional intent. In this context it is important to recognize that, apart from the ozone reclassification provisions, the Act contains provisions - section 110(a)(2)(D) and 110(a)(2)(A) - that obligates states to prohibit pollution including ozone and its precursors - from sources within the state that contribute significantly to nonattainment and maintenance problems in downwind areas (whether within that state or outside it). (Section 110(a)(2)(A) does not expressly deal with transport but imposes a general obligation on a state to do what is needed to meet its CAA obligations, which include bringing nonattainment areas within the state into attainment and, if upwind areas within the state contribute significantly to nonattainment, dealing with emissions from those areas.) Congress was cognizant of the need to control such emissions, and of the inequities between upwind and downwind sources that could result if upwind areas did not impose emission controls on their sources that contribute to downwind air quality problems. Congress thus sought to establish a regime that would eliminate such inequities.

Such controls were not imposed in the timeframes anticipated

by Congress. As explained in EPA's transport policy, it in fact took many years for EPA and the States to gain a sufficient understanding of the interstate and intrastate ozone transport problem to determine the appropriate division of control responsibilities between the upwind and downwind areas under the Clean Air Act. It was only through the work of the Ozone Transport Assessment Group (OTAG), which consisted of members from states (including the State of Texas), industry and environmental groups, and EPA's subsequent NOx SIP call, promulgated in October, 1998, that a better scientific understanding of ozone transport resulted and how to divide the responsibilities among and within the states was established. These developments occurred after the attainment date of November 1996 for the BPA area. Nor did Congress intend that an upwind area within a state, but with a later attainment date, such as HG, should accelerate the timetable provided for its own attainment as an indirect means of controlling transported pollution in a downwind area like BPA.

As EPA stated in its explanation of the legal basis for its attainment date extension policy, the graduated control scheme in sections 181 and 182 of the Act expressed Congressional intent that areas have varying attainment dates, based on the severity of their air quality problem. While all areas must attain "as expeditiously as practicable", the more polluted areas are given

later deadlines because they must accomplish greater reductions. Thus many upwind areas have later attainment dates than the downwind areas that they are affecting. With respect to the BPA area, the upwind area affecting it, the HG area, has an attainment date eleven years later than the BPA area's original attainment date. EPA has interpreted section 110(a)(2)(A) of the Act as incorporating for areas within the same state the requirement, analogous to section 110(a)(2)(D)(i)(I) for areas in different states, that an upwind area, consistent with the provisions of the Act, be prohibited from contributing significantly to nonattainment in a downwind area.

"demonstrate Congressional intent that upwind areas be responsible for preventing interference with timely downwind attainment." They must be reconciled, however, with express Congressional intent that more polluted areas be allotted additional time to attain. Since Congress failed to specify how to fill this gap, EPA's policy interprets the Act to harmonize the attainment demonstration and attainment date requirements for downwind areas affected by transport both with the graduated attainment date scheme and the schedule for achieving reductions in emissions from upwind areas. Not to do so would result either in penalizing downwind areas for upwind areas' pollution or shortening the time for emissions reductions and attainment in

the upwind areas - timeframes that Congress had expressly determined should be lengthier.

To apply the reclassification provisions of section 181(b) without taking into account the timing of the identification and implementation of the emission reductions needed to eliminate the significant contribution of upwind areas to the downwind areas would result in the downwind areas' sources being required to implement potentially costly control measures to offset the effects of upwind area pollution - pollution that will be eliminated by emissions reductions in the upwind areas with later attainment dates. Imposing on downwind areas the burden of controlling for pollution attributable to upwind sources would compound the inequities that Congress was seeking to avoid, thereby frustrating Congressional intent.

Section 181(b)(2) provides that EPA should determine whether an area attained the standard "within six months following the applicable attainment date (including any extension thereof)."

This reference to extensions in section 181(b)(2) is not limited to extensions granted under section 181(a)(5). Nor does section 181(a)(5) state that Congress intended it to be the only source for an extension.

Moreover, section 181(a)(5) addresses only one specific type of an extension. The fact that Congress provided an extension based on air quality that is near attainment at the time of its

deadline does not imply that Congress precluded the Administrator from conferring extensions based on other considerations — such as the case when air quality is affected by downwind transport. The principle underlying section 181(a)(5) — that areas should not be reclassified if they have done enough to control local air pollution but are still not able to attain — also applies in the case of downwind transport. Section 181(a)(5) shows that Congress was not unalterably opposed to extensions of attainment dates without requiring an area to be subjected to reclassification and the increased control burdens that go with reclassifications. Indeed, section 181(a)(5) indicates that Congress wanted to extend attainment dates without adding control obligations when an area had done what was apparently sufficient to bring it into attainment.

The United States Court of Appeals for the District of Columbia Circuit has previously held that EPA may extend SIP submission deadlines even without explicit statutory authorization. In Natural Resources Defense Council, Inc. v. EPA, 22 F.3d 1125, 1135-36 (D.C. Cir.1994), the Court upheld EPA's extension of a statutory deadline for submission of NOx rules and a NOx exemption request under section 182(f). Although the Court did not use the theory advanced by EPA, the court did find that the Agency had authority under the CAA to extend the deadline. EPA had found that additional time would be needed for

States to conduct photochemical grid modeling in order to document the effects of NOx reductions on an area. EPA had found that "the time needed to establish and implement a modeling protocol and to interpret the model results will, in a variety of cases, extend beyond the November 15, 1992 deadline for submission of NOx rules." EPA thus extended the submission deadline, provided the states could show that modeling was not available or did not consider effects of NOx reductions and that the states submit progress reports on the modeling. The D.C. Circuit upheld EPA's extension of the deadline and of EPA's time to review the submissions and make an exemption determination. The Court found that "because only a single NOx RACT submission is required under the statute, it is logical to infer that Congress intended data supporting exemptions to be included in that submittal and that the EPA have the full 14-18 months to review them and to make an exemption determination." Even in the absence of explicit statutory authority, the Court held that "had Congress foreseen the exemption timing problem, a matter outside the EPA's control, it would have elected to accord the EPA the full statutory review time." 22 F.3d at 1136. The court ruled that "under the circumstances here the NOx RACT deadlines were properly extended to further the Clean Air Act's purposes." Id. At 1137.

Here, similarly, EPA's and the states' inability, until

recently, to adequately document the impacts of upwind areas on the attainment status of downwind areas, and to assess and allocate responsibilities among the areas, caused a delay in meeting the attainment deadlines. EPA believes that, had Congress foreseen this timing problem, it would have elected to accord the states and EPA more time to meet the attainment deadlines without imposing reclassification requirements on downwind areas. As in the case of the delayed photochemical grid modeling needed for the NOx submissions at issue in NRDC v. EPA, EPA has shown that the ability to document and analyze ozone transport was delayed. And as with the criteria imposed on areas seeking NOx submission extensions in NRDC, EPA has required analogous showings by the states, limiting the extensions to those areas that document a transport problem and that submit attainment demonstrations and adopt local measures to address the pollution that is within local control.

And lastly, Texas has benefitted from the OTAG/NOx SIP call experience. From this modeling we (EPA and Texas) gained a better understanding of the role NOx emissions play in the formation and transport of ozone. Earlier we had thought local VOC was the major contributing factor, but through the OTAG regional modeling and other analyses being conducted during that time period we learned that NOx emissions play a major role in ozone formation and that ozone transport distances are much

longer than envisioned. As a result TNRCC improved, through its regional modeling to develop boundary conditions, the manner in which transported NOx is treated. Also, during this time period they benefitted from improvements in our emissions inventories and updates to the carbon bond IV chemistry in the model (e.g., improvement in the isoprene chemistry). These improvements were necessary for us to understand the ozone problem in BPA.

Though not a product of the OTAG or NOx SIP call modeling,
TNRCC did use this time to better understand the land/sea breeze
phenomenon which has added a level of complexity to the HG and
BPA analysis not seen any where else in the country (with the
exception of some lake breeze effects in the Lake Michigan area).
Emissions in the HG and BPA areas are emitted into the local
atmosphere where ozone formation begins, later emissions and
ozone formed are transported out over the warm air over the Gulf
of Mexico where the warmer temperatures further activate the
chemistry to form more ozone which is then transported back
inland over both areas. So far, current meteorological models
have not been able to accurately simulate this process. However,
our understanding of what is happening has improved to the degree
that we at least know better how to interpret the photochemical
model results.

As for Section 182(i), it has no bearing on the authority of the Administrator with respect to the attainment date extensions

at issue here. Section 182(i) applies to the authority of the Administrator after an area has been reclassified, and relates to the setting of an attainment date for the reclassified area. It does not apply to an area that is not being reclassified, but rather is being granted an extension of its attainment date that effectively defers the applicability of the reclassification provisions. Here, EPA is authorizing an attainment date extension to relieve an area from reclassification requirements, and thus 182(i) does not apply. The section explicitly applies to an area that has already been reclassified, and indicates nothing about the authority of the Administrator to extend an area's attainment date prior to a determination that the area must be reclassified. Nor does section 182(i) indicate Congressional intent to deny EPA authority to interpret the Act consistently with provisions designed to prevent downwind areas from being forced to compensate for upwind pollution.

Comment 2: The Act does not authorize EPA to extend the time for implementation of adopted local control measures. EPA's approach allows downwind areas to defer implementation of local measures until the extended attainment deadline, thereby precluding any determination that the local measures have achieved the degree of emission reduction necessary to provide for attainment when the upwind sources are controlled. EPA unlawfully proposes to allow attainment date extensions for

downwind areas to implement local control measures. Under sections 182(b)(1), 182(c)(2)(A), and 172(c)(1), downwind areas must provide for attainment of the NAAQS, and EPA unlawfully seeks to lessen these statutory obligations.

Response 2: As explained in Response 1, above, EPA's attainment date extension policy aims to effectuate, not frustrate the intent of Congress, by providing for an equitable allocation of responsibilities between upwind and downwind areas. Under EPA's interpretation, when an upwind area interferes with a downwind area's ability timely to attain the standard, the downwind area retains the obligation to adopt all applicable local measures, and to implement them as expeditiously as practicable, but no later than the date by which the upwind reductions needed for attainment will be achieved. Moreover, EPA requires that the area submit an approvable attainment demonstration containing any necessary, adopted local measures and showing that, assuming the appropriate upwind emission reductions, the area will attain the 1-hour standard no later than the upwind area's attainment date. Thus both the upwind and downwind areas are held accountable for their respective shares of the emissions reductions required to achieve attainment in the EPA views this coordination of the responsibilities of the upwind and downwind areas not as a lessening of the statutory obligations, but as a reconciliation of them with the reality of

air transport as we have come to understand it, and with the intent of Congress that areas make expeditious progress towards attainment without sacrificing basic principles of fairness. attainment date extension policy thus will still lead to attainment as expeditiously as practicable, taking into account the upwind contribution. Indeed, given the impact of the upwind area's contributions and the need for the upwind area emissions reductions, requiring local contributions earlier would not accelerate attainment, considering that EPA is requiring the downwind areas to implement local controls as expeditiously as practicable. Moreover, the difficulty until recently of assessing relative contributions and responsibilities of upwind and downwind areas lends support to extending attainment deadlines in these circumstances, even without express statutory permission. See NRDC v. EPA, discussed supra, in Response to Comment 1.

Comment 3: Reclassification alone has no immediate or mandated regulatory consequence. A SIP revision can consist of a showing that attainment will result from implementation of emission reductions already required pursuant to the SIP call.

EPA's Extension Policy is inconsistent with Clean Air Act sections 179(c) and (d). This provision does not require additional local control measures beyond those previously approved and implemented by the State if adequate control

measures have been adopted for upwind areas and are in the process of being implemented.

Response 3: Reclassification does impose regulatory consequences. Section 182(i) requires that "each state containing an ozone nonattainment area reclassified under section 181(b)(2) shall meet the requirements of subsections (b) through (d) of this section as may be applicable to the area as reclassified." Thus the area must meet the more stringent requirements of a higher classification, including new source review offsets and changes in cutoffs for permitting. The provisions of section 181(b) apply to reclassification of ozone areas. Sections 179(c) and (d) do not apply to ozone areas that are classified as marginal, moderate, or serious, which are subject to the requirements of section 181, if EPA determines that they failed to attain the ozone standard as of the applicable attainment date pursuant to that section.

Comment 4: Sections 176A and 184 of the CAA do not support EPA's extension policy. Congress left no room in the statute for attainment date extensions for downwind areas, considering instead the additional recommended OTC control measures for upwind areas to be sufficient. Sections 110(a)(2)(D)(i)(1) and 110(a)(2)(A) do not authorize the EPA policy. Section 110(a)(2)(D) imposes a burden only on upwind states and does not relieve downwind states of their obligation to attain by the pre-

set attainment dates. EPA lacks the authority to rewrite the extension authority Congress wrote into sections 181(a)(4) and (b)(3). Congress was well aware of the transport problem and addressed it in explicit provisions, including section 110(a)(2)(D), section 110(a)(2)(A), section 184, section 176A, section 126, section 182(h), and section 181(a)(4). Congress knew how to address pollutant transport and how to draft an attainment date extension addressed to it when it wished to do It also provided for voluntary reclassification under section 181(b)(3) to be available for downwind areas if affected by transport. Congress dealt with transport explicitly in sections 181(a)(4), 182(h) and 182(j)(2). Congress knew how to exempt transport-affected areas from control requirements if it wanted to, as it did for rural transport areas under section 182(h). Congress limited relief for areas subject to transport to exemption from sanctions, but did not extend this to section 110(c) FIPs. H.R. 101-490, at 248. This shows Congress' intent to apply all of the CAA enforcement tools except for sanctions under section 179. Congress considered the effects of transport, but not in the reclassification context. Congress did provide for attainment date extensions, but not in this context.

Response 4: Having crafted provisions in the 1990

Amendments that it believed would be adequate to address the problem of downwind nonattainment, Congress did not expressly

provide for an attainment date extension based on transport. the absence of such a provision does not prevent EPA from inferring that Congress would have intended to provide such relief should the express provisions fail to function as envisioned. In fact, the manner in which Congress did address the issue of transport shows that EPA's interpretation is consistent with Congress's approach in other sections of the Act. EPA's interpretation resolves the problem that arose when the express statutory tools failed to function as Congress had envisioned. It also, as EPA pointed out in its guidance, 61 FR 14441 (March 25, 1999), provides a means to reconcile the attainment demonstrations and attainment date requirements for downwind areas with the graduated attainment date scheme and schedule for achieving reductions in the upwind areas. Congress intended that upwind areas be responsible for preventing interference with downwind areas' attainment dates, it also expressly allotted more time for certain upwind areas to reduce their emissions so as to attain the standard.

EPA disagrees with commenters that Congress intended section 110(a)(2)(D) and the other transport provisions to exclude the possibility of further relief for downwind areas. These sections express Congressional intent that downwind areas not be saddled with responsibility for pollution beyond their control. Their premise was that there would be a means of redress against upwind

areas prior to the downwind area's attainment date - a means that also would not be at odds with Congress's decision to provide longer attainment periods for upwind areas confronting onerous pollution problems. But, as EPA pointed out in its guidance, there was in fact no practicable way to carry out the Congressional scheme until a much more comprehensive understanding of the complex facts of ozone transport could be achieved.

Although Congress in the 1990 Amendments and in prior versions of the Clean Air Act attempted to deal with the issue of transport, the reality of the problem proved far more complicated and intractable than expected. As explained in EPA's guidance, 64 FR 14441 (March 25, 1999), and in the January 3, 2001, rulemaking granting extensions to serious areas (66 FR 586), it took many years for EPA and the states to study, analyze, and attempt to resolve the allocation of responsibility for transported ozone pollution. A detailed description of the history of efforts to address ozone transport through the 1990's may be found in the preambles to these NOx SIP Call and Section 126 rulemakings. 63 FR 57360-63, 64 FR 28253-54.

The BPA and HG areas are not subject to the NOx SIP call.

But the analysis of transport developed for the NOx SIP Call

aided EPA and Texas in understanding the transport problem in the

BPA area. See Section C, Response 2. The BPA SIP was submitted

in November 1999 and supplemented in April 2000. The HG SIP was submitted in December 2000, the date for submission for all severe areas.

Thus, although Congress in the Clean Air Act had formulated a prohibition on transport interfering with downwind attainment, it remained largely theoretical until EPA and the states could understand how to identify, quantify, and analyze the transport of emissions, and develop regulatory means to coordinate the respective responsibilities of a multitude of upwind and downwind areas. Although Congress endowed EPA and the states with legal tools to protect downwind areas from interference with attainment, it did not give them the ability to use the tools in the time frame anticipated by Congress. By the time EPA and the states gained an understanding of regional transport sufficient to allow enforcement of the provisions of the Act, it was too late to help some downwind areas meet their attainment dates, including moderate areas such as the BPA area.

As set forth in Response 1 above, Congress intended, through enactment of the provisions addressing transport cited by commenters, to prevent downwind areas from being held accountable for pollution over which they exercise no control. Because of the complexity of the transport problem, EPA and the states could not deploy these statutory provisions in time to achieve attainment by their original attainment dates. But this does not

mean that Congress would have intended EPA to construe the very provisions designed to protect downwind areas as precluding EPA from interpreting the statute to provide the relief that those provisions failed to furnish. Notwithstanding the absence of an express provision for an attainment date extension based on transport, EPA believes that, taking into account the Act read as a whole, Congressional intent supports EPA's interpretation of an attainment date extension in the circumstances presented here.

Commenters argue that the fact that Congress formulated various provisions addressing certain specific types of issues concerning transported pollution, but did not provide for an explicit attainment date extension based on transport, should be taken as proof that Congress meant to preclude such relief. But each of the provisions cited by commenters was designed to address a different problem from the one EPA addresses here, and none undermines EPA's interpretation that Congress intended to provide relief in the situations currently confronted by downwind areas. As shown in EPA's previous responses, Congress expressed its intent in the transport sections to protect downwind areas from the burdens of transported pollution, but the mechanisms it provided could not be invoked in time.

For example, section 181(a)(4) concerns the potential for adjustment of the original classification of an area if its design value is within a certain margin. It allows the

Administrator to consider a number of factors, including among them transport. This provision in no way casts doubt on the Congressional intent not to penalize downwind areas through mandatory reclassification should they later fail to attain the standard due to transport. Section 182(h) provides a mechanism for original classifications of rural transport areas as marginal areas, the lowest level of ozone nonattainment areas. Far from indicating that Congress did not intend relief for areas that are victims of transport, this provision reflects Congressional concern with not burdening areas with responsibility for transport not of their making. It sheds no light on whether Congress would have intended EPA to reclassify areas suffering from transported pollution if they were subsequently unable to meet their attainment dates.

Nor, as commenters suggest, would so-called "voluntary" reclassification under section 181(b)(3) furnish an adequate remedy for the situation confronting areas that fail to attain due to interference from transport. An area that felt constrained to seek "voluntary" reclassification would still be forced to subject itself to more stringent requirements to control local pollution in lieu of imposing on upwind areas the responsibility for the transport they caused. Further, the imposition of the more stringent local controls would still not bring the downwind area into attainment. It could not reach

attainment unless and until the upwind area reachs attainment and stops affecting the downwind area's ability to attain.

Comment 5: The states had power to timely submit SIPs controlling local pollution to the full extent that it was in the state's power to require, and combine it with a request to EPA to invoke EPA's authority to control upwind pollution, and in this way the state could have attained by the applicable deadline. EPA's 1994 overwhelming transport policy required transport modeling to be documented the same time as the attainment demonstration due in 1994. There is no justification for allowing states to request attainment date extensions based on transport of which they were aware many years ago. An opening is created for upwind states to argue that the NOx SIP call effectively accelerates their attainment dates. The OTC was to recommend measures to bring about attainment by the deadlines "in this subpart."

Response 5: As pointed out in EPA's Response 4, above, an awareness that transport was occurring is not equivalent to an ability to identify, analyze, and control the emissions that cause it. This ability, which grew out of years of study and joint effort, did not coalesce until 1998. Thus, downwind states and areas were faced with the prospect of having to shoulder responsibility for pollution not of their making - a responsibility that Congress did not intend to impose on them,

even as they were aware of an ongoing effort, involving EPA and thirty-seven states (including Texas), to allocate responsibilities for transport through the OTAG process. As EPA stated in its guidance on the attainment date extension, the state of knowledge about and the ability to document and model transport has advanced considerably since the issuance of EPA's overwhelming transport guidance. The commenters seek to ignore the climate of uncertainty in which states and EPA were operating with respect to controlling transported pollution.

But even with the allocation of responsibilities now available, EPA believes that Congress did not intend to accelerate the obligations of upwind areas so that downwind areas can meet earlier attainment dates. This would undermine the objective, firmly embodied in the graduated attainment framework of the Clean Air Act, to allow upwind areas with more severe pollution longer attainment deadlines. Upwind areas with later attainment dates still find it difficult to reduce emissions solely to control for transport without accelerating the time frames intended by Congress. It is unrealistic to expect upwind areas to be able to segregate out the reduction of emissions for purposes of transport from the reduction of emissions for purposes of achieving attainment in the upwind area.

The fact, as a commenter points out, that Congress envisioned that the OTC-recommended measures would bring about

attainment by the dates "in this subpart" reflects Congress' over optimistic view that transport would be understood and controlled in time to allow upwind areas to be held accountable for their contributions to downwind nonattainment. The comment underscores that Congress expected upwind reductions to take place by the time the downwind area was supposed to attain - this confirms that Congress expected that upwind pollution would be controlled prior to downwind attainment deadlines, and that only local pollution would remain as the downwind area's responsibility. But, as we previously stated, the time line for analyzing and assessing transport, and the resulting ability to set boundary conditions for modeling attainment demonstrations, did not keep pace with Congress' expectations. EPA is extending attainment deadlines in order to allow upwind areas to assume responsibility for the pollution they generate and that is transported across State boundaries or to downwind areas within a state, and to fulfill the Congressional intent that downwind areas not be saddled with this burden.

Comment 6: EPA's decision directly conflicts with NRDC v. EPA, 22 F.3d 1125 (D.C. Cir. 1994), where the Court held that EPA could not extend a clear statutory submission deadline.

Response 6: To the contrary, EPA believes that NRDC v. EPA supports EPA's authority to issue the attainment date extensions at issue here. In that case the U.S. Court of Appeals for the

D.C. Circuit upheld EPA's extension of SIP submittal deadlines even though such extensions were not expressly permitted by the Clean Air Act. See the discussion in Response to Comment 1, above. The Court relied in part on the need for additional time to undertake photochemical modeling to document the impact of NOx reductions on individual areas, an effort that took more time than Congress anticipated. Here, the effort to document, model, and analyze regional ozone transport issues and assess responsibility for relative contributions is, if anything, more complex than the NOx exemption showings for which the Court upheld deadline extensions in NRDC v. EPA. The Court's reasoning in NRDC v. EPA should be fully applicable to the policy at stake here.

establishing the mandatory emission reduction targets for upwind States might justify the delay in adoption of adequate section 110(a)(2)(D) measures by the upwind states," but concludes that the delay "cannot justify delaying the obligation of downwind States to implement all the local measures necessary for attainment by the statutory deadline." One commenter, while acknowledging that it "does not take issue with EPA's objective of accommodating the delayed control contributions from upwind areas," contests EPA's claim of authority to extend attainment dates. This commenter suggests that the appropriate remedy is

for EPA to authorize states to take credit for mandated emission reductions when preparing attainment demonstrations and determining the degree of local controls needed to attain.

Response 7: While the commenter recognizes that there was a delay in understanding and regulating transported pollution that "might justify the delay" in upwind states adopting section 110(a)(2)(D) measures, and agrees with EPA's objective in taking this delay into account, the commenter's proposed solution fails to address the problem it acknowledges. The commenter suggests allowing areas to take credit when they prepare their attainment demonstrations - but this solution addresses only the planning requirement, and does not assist the areas in solving the problem of failing to meet their attainment deadline. It is to address this issue, and to effectuate Congressional intent to avoid penalizing downwind areas in these circumstances, that EPA has formulated the attainment date extension. The delay in ascertaining the amount and achieving the reality of upwind reductions - a delay conceded by commenters - resulted in uncertainty in a downwind area's ability not only to plan for attainment, but to realize it.

This comment also highlights the difficulties that EPA's attainment date extension policy was designed to address: namely that the states and EPA were (1) not able to assess relative contributions until it was too late to implement the controls to

bring about attainment; and (2) upwind areas with longer attainment dates should not be required to accelerate their reductions in time to help bring about attainment as scheduled in affected downwind areas with earlier attainment dates. As the policy explains, the determination of relative upwind and downwind contributions, how downwind areas should model their attainment demonstrations to show the upwind areas' impact, and the allocation of responsibility for determining controls did not occur in time for a number of areas to meet their attainment deadlines.

Comment 8: EPA's approach allows emission reductions from motor vehicles to be deferred beyond the deadlines currently required by the Act. The policy allows deferral of conformity budgets beyond the statutory attainment year. It is also inconsistent with statutory requirements for reasonable further progress in section 182(c)(2)(B), for implementation of all reasonably available control measures as expeditiously as practicable in section 172(c)(1), and for requiring that transportation plans and TIPs "will not delay timely attainment of any standard or . . . other milestones in any area in section 176(c)(1)."

Response 8: EPA disagrees with the commenter that the policy allows deferral of reasonably available control measures beyond dates contemplated in the Act. The statute requires SIPs

to provide for attainment as expeditiously as practicable and for reasonable further progress as necessary to provide for attainment. The RACM measures the commenter is apparently referring to are not specific measures that the statute requires to be implemented by a fixed date. Rather, they are whatever RACM measures, including motor vehicle measures, necessary to provide for attainment and RFP by the applicable attainment date. Thus, whatever attainment date is applicable, an attainment date extension, etc., defines the outside date by which RACM measures, including motor vehicle measures, necessary to provide for timely attainment must be implemented. A determination must then be made whether any additional measures could advance that date, but the analysis is keyed to the established attainment date. commenter also complains about delays in establishing budgets for conformity purposes, and requirements that transportation activities not delay timely attainment. Again, these issues are not relevant to establishing an appropriate attainment date. Motor vehicle emission budgets for conformity purposes are those budgets that are established for the attainment year. The Act does not require that these budgets be set for any specific year, but rather contemplates that they will be established for the attainment year. Where EPA has properly determined that an attainment date extension should be granted, conformity budgets are required for the extended attainment year; they are no longer

required for the superseded attainment year. The requirement that transportation activities not delay timely attainment is a duty imposed on transportation planning agencies to insure that their activities will not interfere with attainment of the standard by the applicable attainment date. This duty is irrelevant to establishing the appropriate attainment date in the first instance. Once an applicable attainment date is established, transportation planners must insure that their activities will not delay attainment by that date.

Comment 9: A commenter argues that under the terms of section 188(e), an extension of the PM attainment date may not be granted unless the State demonstrates that the area's SIP contains "the most stringent measures that are included in the implementation plan of any State or are achieved in practice in any Sate, and can feasibly be implemented in the area."

Moreover, section 188(e) provides for consideration of transboundary emissions from "foreign countries," not from U.S. sources. EPA's proposed ozone nonattainment extension policy includes neither of these limitations.

Response 9: The provision cited by commenters applies the PM-10 standard, and is not applicable to attainment dates for ozone. Moreover, the regulatory regimes applicable to ozone and PM-10 are quite different, as are the types of transport issues that arise with respect to these two different pollutants. The

issues EPA and the states confront with respect to long-range regional transport of ozone do not apply to PM-10. Beyond that, section 188(e) embodies a standard of "impracticability" as a basis for seeking an extension for a PM-10 attainment deadline. With respect to the ozone attainment deadlines at issue here, EPA is not granting extensions solely on the grounds of impracticability of attaining the standard, but rather, that Congress intended both upwind and downwind areas to have an opportunity to bear the responsibility for their respective contributions to an area's attainment problems.

between the statutory deadlines and transport provisions fails, since these provisions must be read together so that the upwind area's "obligation to control pollution affecting the downwind area - be it interstate or intrastate - falls due no later than the downwind area's attainment date." EPA's argument that areas with longer attainment dates be given additional time ignores the statutory requirement that areas attain as expeditiously as practicable, even if that results in attainment before section 181(a)(1)'s outer deadlines. The section 181 attainment deadlines are "outside limits." A commenter argues that Section 181(a) does not prevent upwind areas from abating pollution in downwind areas in time to meet the downwind area's attainment date. EPA's policy cannot be defended as necessary to reconcile

181(a) with the Act's anti-transport provisions. Upwind areas should be able to control pollution contributing to downwind area's nonattainment even before reaching their own later-prescribed attainment dates.

A commenter disputes EPA's interpretation of the language in section 110(a)(2)(D)(1) that SIP provisions prohibiting emissions which cause transport be "consistent with the provisions of this subchapter." EPA should interpret the provisions to respect the attainment schedules of sections 181 and 182, and address transport separately. No reference is made to any legislative history that would legitimize EPA's reading. An upwind area's obligation to control transported pollution does not depend on its own timetable for attainment. EPA's policy excuses upwind area's responsibility from their obligations under sections 110, 176A and 184, exempting them via granting extensions to downwind areas. The policy defers downwind action until the upwind area attains.

EPA improperly assumes that it would not be practicable for upwind sources to reduce emissions contributing to downwind nonattainment prior to the time such reductions would be required to attain in the upwind area. The presumption should be precisely the opposite: unless the upwind state can show that such reductions are impracticable, EPA should assume such reductions can be made at times to eliminate the upwind state's

contribution to nonattainment downwind by the downwind area's attainment date. EPA's rule eliminates the Act's requirement that attainment be accomplished as expeditiously as possible. Section 184 indicates Congressional intent that upwind areas make reductions if necessary to permit downwind areas to attain by their statutory deadlines.

Response 10: EPA disagrees with the commenter's contention that it has "manufactured a conflict." Rather, EPA believes that it recognizes and resolves the real tension between the statutory deadlines and the transport provisions. EPA explained this tension in its guidance on the attainment date extension policy. See also EPA's response to Comment 4. Congress did not intend that areas with more severe pollution problems such as the HG area, and accordingly longer attainment dates, be forced to accelerate reductions on a timetable that otherwise would not be required to meet their obligation to attain "as expeditiously as practicable." Commenters want EPA to read the requirement for upwind areas, not as mandating attainment "as expeditiously as practicable" - but as requiring deadlines that are not practicable, solely for the purpose of obtaining downwind reductions.

In dealing with ozone, a regional pollutant, an upwind nonattainment area cannot make reductions for transport purposes without affecting its schedule for making reductions for

attainment purposes. Compelling the upwind area to make drastically faster reductions is akin to asking it to go on a crash diet. But the interplay of the statutory provisions on attainment deadlines and transport reduction indicates that Congress intended upwind areas to reduce transport, but not to the extent of requiring shorter schedules for upwind attainment. Separating out reductions for purposes of attainment and those for the purposes of transport is more difficult than commenters depict, and EPA believes that Congress did not intend a regimen of drastic reductions without regard to the upwind area's attainment schedule. In reality, an upwind area that remains in nonattainment may well be shown to continue to transport pollution to an affected downwind area.

Congress provided statutory tools to address the issue of transport, and believed that they would be used to reach an accommodation among upwind and downwind areas — but as EPA and some commenters have recognized, this accommodation took longer than anticipated. Congress did not, however, intend that upwind areas be forced to apply drastic measures in order to allow the downwind areas to meet their shorter attainment periods.

Although the attainment deadlines can be viewed as "outside limits," they in fact represent the dates at which statutory consequences must be considered. As long as no earlier date is deemed to be "as expeditiously as practicable," there is no

evidence that Congress considered an earlier date to be acceptable for these areas, in disregard of "practicability."

Even if earlier deadlines would be beneficial to downwind areas,

Congress did not indicate that this criterion should override the criterion of "practicability" for the upwind area.

In administering the Clean Air Act and the NOx SIP call, EPA has interpreted section 110(a)(2)(d)'s significant contribution test as requiring reductions as expeditiously as practicable without requiring upwind areas to impose draconian measures. The United States Court of Appeals for the District of Columbia Circuit recently upheld EPA's use of a cost component in applying that section's significant contribution test. Michigan v. EPA, 213 F.3d 663, 674-679 (D.C. Cir. 2000). EPA decided that the states that were "significant contributors" under section 110(a)(2)(D) need only reduce their emissions by the amount achievable with "highly cost-effective controls." 63 Fed. Reg. At 57403. "Thus, once a state had been nominally marked a 'significant contributor,' it could satisfy the statute, i.e., reduce its contribution to a point where it would not be 'significant' within the meaning of section 110(a)(2)(D)(i)(I) by cutting back the amount that could be eliminated with 'highly cost-effective controls." 213 F.3d at 675.

In applying section 110(a)(2)(D), the D.C. Circuit concluded that EPA can consider not only air quality impacts, but

also costs of control. Thus EPA has been upheld in interpreting the Act in a way that limits the upwind area's responsibility to control pollution so as to mitigate its responsibility under section 110(a)(2)(D). The upwind area should not have to impose draconian controls. As the court in Michigan v. EPA, concluded, "there is nothing in the text, structure, or history of section 110(a)(2)(D) that bars EPA from considering cost in its application." 213 F.3d 679. The Court's discussion makes clear that EPA, in interpreting the responsibilities of upwind states under section 110(a)(2)(D), may consider differences in cutback costs in determining what constitutes a significant contribution, and that EPA's inquiry is based on balancing a number of considerations to balance health effects and cost-effectiveness.

EPA's policy does not excuse the upwind areas from fulfilling their obligations under section 110 and part D.

Upwind areas will be held to section 110, part D and RACM requirements. EPA has determined the out-of-state upwind areas' section 110 obligations through the SIP call. The SIP call requires reductions by the date EPA determined was as soon as practicable to eliminate significant contributions to downwind areas¹. This is coupled with the upwind area's obligation to attain as expeditiously as practicable. The upwind area in this

¹Because the D.C. Circuit stayed the obligation of States to submit plans by 13 months, the court also extended by 13 months the date by which sources must implement the necessary controls.

instance, the HG area, must reduce emissions as soon as practicable to eliminate its significant contribution to the BPA area. The HG area must also attain as expeditiously as practicable. It is appropriate to hold downwind areas to the upwind area's attainment date as an outside limit until EPA acts on the upwind area's attainment demonstration. The modeling evidence we have now shows that the upwind area needs to come into attainment for the downwind BPA area to attain the standard.

The BPA area is implementing local measures by 2005. The schedule is based on time necessary for the engineering and installation of control equipment on point sources during their regular maintenance and down times. This period must be as soon as possible, but such that BPA does not incur an economic hardship. This timing is appropriate and expeditious. Further, EPA recalculated the estimate of the future design values based solely on modeled days when winds are not coming from the HG area. The results indicate that the local measures in BPA are adequate to show attainment on days when transport is not an issue. This confirms that BPA has done all that they can to address the local portion of their nonattainment problem.

Comment 11: The section 182(j)(2) "but for" standard applies to intrastate transport. An area must demonstrate that it would have accomplished attainment but for the failure of other areas to implement sufficient controls. The policy is

vague, and fails to establish clear standards for a showing of transport. The "affected by transport" standard is unclear.

Response 11: EPA is not constrained by the section 182(j)(2) standard. This section is limited in application to single nonattainment areas that are located in more than one state, and does not address transport coming into an area from another, separate area.

The Texas modeling for the BPA and HG modeling domain showed that there were significant impacts from the upwind area on the downwind area, no matter whether one used as a standard the "but for," "significant contribution" or "affected by transport" formulation. EPA's review of the number of days when there is an exceedance in BPA for the 1990-94 data shows 41 exceedances in the BPA area, of which 16 days are when winds are from the HG This is more than 3 exceedances per year (three being the maximum number of exceedances allowed to still be in attainment) for BPA which are influenced by transport from HG. Given the two areas are less than 24 hours transport from each other, and the life time of ozone and its precursors, it is reasonable to believe ozone observations and emissions emitted in HG will arrive in BPA within 24 hours. This argument alone closely links the two areas. Modeling which eliminated the HG emissions and resulted in 10-30 ppb change in ozone levels in BPA, as documented in the TSD, shows HG is having a major impact on BPA's

ability to attain the 1-hour ozone standard.

Congress intended that an upwind area that significantly contributes to a downwind area's nonattainment problem should bear responsibility for that pollution. The Texas modeling shows that significant contribution is made by the upwind area to the downwind area seeking the attainment date extension. EPA still believes that Congress would not have intended to impose the burden on downwind areas for an upwind area's contribution.

Comment 12: Transport is already incorporated into each area's section 181 design value and thus is assumed in setting the projected attainment date. Congress understood transport resulted in elevated design values, but did not authorize classifications to take into account transport, and provided for reclassification by operation of law based on air quality. section 181(a)(1), Congress directed that ozone nonattainment areas be placed within certain classifications based solely on their design values, regardless of transport. Congress understood that many areas were classified as moderate or severe at least in part because of ozone transport, but did not grant EPA discretion to take such transport into account when establishing initial classifications under the Act. Why does EPA believe so strongly that its approach is consistent with Congressional intent, given Congress's refusal to consider transport in establishing the initial classifications and in

light of sections 181(b)(2) and 182(i)?

Response 12: Section 181(a)(4) is for a discrete and limited purpose. The fact that this provision governing the initial classification process expressly takes transport into account in a specific way does not mean that EPA is precluded from taking transport into account when providing for an attainment date extension based on transport, prior to invoking the reclassification provisions. See EPA's Response to Comment 1. By providing for an extension of the attainment date, EPA is effectuating Congressional intent that the transport relief provisions have a chance to take effect before EPA has an obligation to determine whether the area has attained for purposes of triggering the reclassification provisions.

Comment 13: EPA has previously concluded that reclassification is not a means of penalizing an area, but a means of providing additional reductions that will benefit public health. EPA rejected the notion that bump-up is a penalty when it reclassified the Phoenix, Arizona area from moderate to serious. There, EPA said:

"The classification structure of the Act is a clear statement of Congress's belief that the later attainment deadlines afforded higher-classified and reclassified areas require compensating increases in the stringency of controls. The reclassification provisions of the Clean Air Act are a

reasonable mechanism to assure continued progress toward attainment of the health-based ambient air quality standards when areas miss their attainment deadlines and are not punitive."

Final Rule, 62 Fed. Reg. 60001, 60003 (Nov. 6, 1997). Why has EPA changed its mind about the functions of reclassification?

Response 13: EPA has not changed its mind about the function of the reclassification provision where the issue of transport is not presented. In the context of Phoenix, a reclassification not involving transport, EPA made the response cited by commenter, and noted that the reclassification provision was not intended to be punitive. This view is consistent with the position that EPA takes here, where the circumstances are quite different from the non-transport reclassification context. In the absence of transport, an area that fails to attain by its attainment date, may still fairly be held accountable for controlling local pollution, and be granted a longer attainment deadline in return for more stringent controls. Under these circumstances, applying the reclassification provisions is not punitive. But in the circumstances EPA and Texas confront here, the local area is not responsible for pollution that interferes with its ability to meet the standard. In such a case, to trigger reclassification would impose on the area the responsibility and costs for pollution beyond its control, and would indeed be punitive. To avoid such a result, and to

effectuate Congressional intent, EPA has interpreted the Act to authorize an attainment date extension.

Comment 14: Congress directly considered and rejected EPA's interpretation of its attainment date extension authority during the Clean Air Act Amendments of 1990. During debate, Senator Kasten expressed concern about the proposed legislation's provisions concerning the "issue of downwind ozone nonattainment." He noted that pollution from Chicago affected southeastern Wisconsin, but described "the difficulty this poses is that the Nation's most polluted urban areas are given a much more generous timetable for meeting air-quality standards. Chicago will have 5 more years to meet air-quality standards than these Wisconsin counties will have." Senator Kasten then noted that because of Chicago's longer attainment date, it was likely that the Wisconsin counties "will be found in violation of the Clean Air Act because of actions taking place outside of their jurisdiction in an upwind State." The commenter claims that Senator Kasten introduced an amendment which provided, among other things, for an attainment date extension for the downwind area until the upwind nonattainment area achieved emission reductions. S. Comm. On Envt. And Pub. Works, A Legislative History of the Clean Air Act Amendments of 1990, pp. 4954-55 (1993). The commenter claims that "the amendment, was, of course, rejected." Thus the commenter argues that Congress,

although it addressed ozone transport in sections 176A and 184, declined to alter the requirements of section 181, even though it was aware of the problem that EPA seeks to solve with its attainment date extension policy.

Response 14: There is no evidence that the amendment discussed by Senator Kasten was ever debated, considered, or voted upon. Commenter cites no support for the proposition that it was considered and rejected. Thus no inferences can be drawn from the fact that the amendment was not embodied in the statute. Moreover, even if the amendment had been considered and rejected, it differed from and went so far beyond the attainment date extension EPA is applying here as to not be probative of Congressional intent with respect to EPA's current interpretation of the Act. Among other things, it would have provided for a new and separate Ozone Transport Region, and would have provided for different obligations and consequences for downwind areas than what is contained in EPA's current interpretation of the attainment date extension policy. Legislative History at 4954-56.

Comment 15: The EPA attainment date extension policy is an illegal expansion of its 1994 overwhelming transport policy.

Response 15: The policy is not an illegal expansion of the overwhelming transport policy, but an appropriate interpretation of the provisions of the Act in order to fulfill Congressional

intent. EPA's current articulation of the attainment date extension policy reflects the considerable advances in understanding and allocating responsibility for transport that have occurred since the formulation of the overwhelming transport policy. These advances have resulted from the work on ozone transport included in, among other efforts, the OTAG, SIP Call, and area modeling programs. EPA thus regards the attainment date extension policy as superseding the overwhelming transport policy. See EPA's earlier responses.

Comment 16: Downwind areas should be required to implement, not just adopt, all required measures before becoming eligible for an extension. Modeling is imprecise and an area might be able to attain if they implement all required measures, which should already have been implemented prior to the original attainment date. A state could have timely submitted all the provisions for control of local pollution as required by sections 182(b)(1)(A)(i), 182(c)(2), and 172(c)(1) providing for the full extent of local reductions that it was in the state's power to require.

Response 16: In granting an attainment date extension for an area, EPA has determined that upwind reductions are necessary to help the area reach attainment. Thus, requiring all local reductions to be implemented prior to the time that upwind reductions are achieved would not accelerate attainment.

Nonetheless, EPA has required that local reductions be implemented as expeditiously as practicable. See EPA's Guidance 61 FR 14441 (March 25, 1999). In this case, BPA has adopted and will be implementing local regulations controlling pollution from local sources, but which will not be able to bring about attainment due to pollution caused by transport due to the transport from the HG area preventing the BPA area attaining.

"will become superfluous once upwind areas reduce their contribution to the pollution problem," 64 Fed. Reg. 14444, is mistaken. First, the measures will produce public health benefits during the period prior to implementation of upwind reductions, and second the Act independently requires all areas to "implement all reasonably available control measures as expeditiously as practicable," 172(c)(1), regardless of what reductions are expected from upwind areas. EPA should not allow downwind areas to postpone implementing local measures until upwind reductions are achieved. This extension is unlawful, and, because unexplained, arbitrary and capricious.

Response 17: EPA disagrees with the commenter's characterization of EPA's actions. EPA is in fact requiring downwind areas to implement the local control measures required under the classification as expeditiously as practicable, but no later than the time the upwind reductions are achieved. See

EPA's Guidance, supra. To obtain an extension the area must have provided that it will implement all adopted measures as expeditiously as practicable, but no later than the date by which the upwind reductions needed for attainment will be achieved. See also response to Comment 16, above. No measures are being postponed as a result of the area's being granted a later attainment deadline. The BPA area has not delayed or postponed the effectiveness of measures because its attainment date is being extended. Texas is enforcing its attainment measures as expeditiously as practicable. The BPA area is implementing local measures by 2005. The schedule is based on time necessary for the engineering and installation of control equipment on point sources during their regular maintenance and down times. period must be as soon as possible, but such that BPA incurs disproportionate economic hardship. This timing is appropriate and expeditious. Further, EPA recalculated the estimate of the future design values based solely on modeled days when winds are not coming from HG. The results indicate that the local measures in BPA are adequate to show attainment on days when transport is not an issue. This confirms that BPA has done all that it can to address the local portion of its nonattainment problem. EPA's interpretation is not unexplained, arbitrary, nor capricious. As EPA has explained, it seeks to reconcile and coordinate the responsibilities of the HG and BPA areas to work

together to achieve attainment. However, as discussed elsewhere, EPA has applied the section 172(c)(1) RACM requirement to these areas.

Comment 18: EPA is excusing downwind areas from the requirement that nonattainment SIPs must provide for attainment of the NAAQS as provided in sections 182(b)(1)(A)(i), 182(c)(2)(A), 172(c)(1), and is also excusing them from the requirement that they implement all reasonably available control measures as expeditiously as practicable, regardless of the reductions required for attainment. EPA's attempt to lessen these obligations is unlawful and, because unexplained, arbitrary and capricious.

Response 18: EPA is not excusing downwind areas from the requirement that they submit SIPs providing for attainment. Nor is EPA excusing downwind areas from the RACM requirement. EPA's interpretation does not exclude what is necessary for attainment; rather, a reasonably available measure is required as RACM if it is needed for attainment or will advance the attainment date. EPA is enforcing this requirement, but allowing the downwind areas to take into account the control contribution of upwind areas that Congress envisioned, and that the commenters themselves acknowledge is embodied in Clean Air Act provisions, in determining the applicable attainment date. EPA is also requiring that the areas implement reasonable control measures as

expeditiously as practicable. See EPA's Responses to other comments.

Comment 19: EPA's policy cannot be defended as a reconciliation of section 181(a) with the Act's anti-transport provisions. Under a proper interpretation of the Act, (1) an upwind area's SIP would ensure that the upwind area's pollution contributing to NAAQS violations in the downwind area would be controlled, no later than the downwind area's attainment date, (2) the upwind area would attain locally as expeditiously as practicable but no later than the date prescribed by section 181(a)(1) for the upwind area, and (3) the downwind area would attain locally "as expeditiously as practicable but not later than" the applicable date prescribed in section 181(a)(1). This reading gives effect to all of the relevant statutory provisions.

Response 19: The commenter concedes that under a proper interpretation of the Act, the upwind area's SIP would ensure that the upwind area's pollution contributing to violations in the downwind area would be controlled, prior to the downwind area's attainment date. But in the circumstances actually confronting EPA and Texas, as EPA has explained in prior responses, it was not possible without accelerating the HG area attainment date, to control upwind transport prior to BPA's original attainment date. Thus, in order to allow the upwind area its alloted time to attain, and to avoid imposing on the

downwind area a burden Congress did not intend, EPA proposed interpreting the Act to adjust BPA's attainment deadlines. By adjusting the attainment date to allow the upwind and downwind areas to carry out the statutory allocation of responsibility that is acknowledged by the commenter, EPA indeed is reconciling the Act and rendering a proper interpretation.

Comment 20: No extension should be granted unless the area is as small as possible. The basis for transport should not be OTAG modeling, since better data is available.

Response 20: The boundary for the BPA nonattainment area was established and codified in 40 CFR part 81 (see 56 FR 56694, November 6, 1991; and, 61 FR 14496, April 2, 1996). The modeling done by OTAG and by EPA in the SIP call and the local modeling done in connection with the BPA attainment demonstration represent the best available modeling.

Comment 21: EPA purports to apply its policy to moderate and serious areas, but moderate areas should already have been bumped up to serious, because their attainment date was November 15, 1996, and the Act requires EPA to reclassify an area within six months of its attainment date under section 181(b)(2)(A). Thus, moderate areas should not be at issue, because such areas should be in serious status, and therefore the relevant bump-up should be from serious to severe.

Response 21: As EPA has noted, its attainment date extension

policy and an adequate understanding of ozone transport were not developed until after the attainment date for moderate areas had passed. See Response to Comment 1. Nevertheless, EPA believes that to deny eligibility for the attainment date extension to moderate areas affected by transport because the policy and science were not available earlier, would work an injustice.

Moreover, EPA believes that applying the policy to these areas is consistent with Congressional intent and with the Congressional approach of applying other types of attainment date extensions after an area has been unable to reach attainment. See, for example, section 181(a)(5).

Under section 181(a)(5), EPA may determine that an area has qualified for an extension after it has failed to attain in its attainment year. Section 181(a)(5) provides that EPA may grant an extension of one year ("the Extension Year") if, in relevant part, "no more than 1 exceedance of the [ozone standard] has occurred in the area in the year preceding the Extension Year." This procedure presumes that the area did not attain in its attainment year, and requires a review of data to determine the number of exceedances in the original attainment year prior to the granting of the extension. Thus, Congress knew and approved of a system for granting extensions after an area had already failed to attain according to its original schedule. EPA's granting of an extension to the BPA area after its original date

for attainment has lapsed is therefore consistent with Congressional intent and the statutory scheme that Congress established in the Act.

In the case of the BPA area, EPA did not act to reclassify this area to serious after its attainment date had passed, nor does EPA believe that it would be appropriate to do so retroactively. Nor does EPA believe that it is consistent with the statutory scheme or Congressional intent to deem the BPA area, in the absence of a notice-and-comment rulemaking on reclassification, to have somehow constructively been bumped up to serious. Moreover, if EPA were to deny the BPA area the attainment date extension and reclassify the area, reclassifying the area to severe would create an injustice. The area would then be required to impose severe area requirements without ever having been afforded an opportunity to attain the standard by employing serious area requirements. Such an approach would in effect impose a retroactive reclassification to serious, coupled with a second reclassification to severe. The U.S. District Court for Washington, D.C., in Sierra Club v. Whitman 98-2733 (CCK) (January 29, 2001 Order), declined to impose a retroactive reclassification in part because it would create this kind of injustice.

Comment 22: EPA's reliance on section 110(a)(2)(D)(i)(1) and section 110(a)(2)(A) for the proposition that EPA is statutorily

authorized to extend attainment dates expressly set under sections 181 and 182 of the Act is erroneous. Section 110(a)(2)(A) states that each SIP shall "include enforceable emission limitations and other control measures... for compliance, as may be necessary to meet the applicable requirements of this chapter." The provision in no way gives EPA the ability to extend the attainment dates expressly provided for under sections 181 and 182. In fact, EPA's statement that the EPA interprets section 110(a)(2)(A) to incorporate the same requirement as section 110(a)(2)(D)(i)(1) that upwind States are prohibited from interfering with the air quality of downwind states that somehow downwind states can magically ignore their attainment dates under section 110(a)(2)(A), a provision that does not even expressly deal with transport.

Response 22: The commenter mistakes the role of EPA's interpretation of section 110(a)(2)(A) in supporting EPA's attainment date extension policy. EPA simply reads section 110(a)(2)(A) as creating, in the intrastate context, a responsibility on the part of a state to control upwind pollution originating in its borders that affects another in-state nonattainment area. This responsibility is analogous to the responsibility the state has under section 110(a)(2)(D) to a nonattainment area located in another state that is affected by pollution from within the upwind state's borders. But, as EPA

pointed out in its attainment date extension policy, EPA believes that this responsibility must be harmonized and read consistently with the graduated attainment date scheme that allows upwind areas with later attainment dates additional time to obtain emissions reductions. In the circumstance of an upwind area with a later attainment date, EPA believes that the upwind area should not be forced to accelerate attainment solely for the purpose of discharging its obligations to the downwind area under either section 110(a)(2)(A) or 110(a)(2)(D). EPA believes that Congress intended to authorize attainment date extensions in the downwind area when necessary to reconcile the need for upwind reductions with the timetable for attainment in the upwind area, whether that attainment area be within or outside the State.

B. Comments Received in Response to April 16, 1999, Notice.

Comment 1: Among the comments received, twenty comment letters were received voicing strong statements of support for EPA not to reclassify the BPA nonattainment area from moderate to severe. No adverse comments were received. These commenters asserted that reclassification would put the economic viability of the BPA area in jeopardy. The commenters believed that the BPA area was affected by transport of ozone and ozone precursor chemicals from the HG area.

Response 1: EPA has reviewed the TNRCC SIP submittals and it is our technical opinion that Texas has demonstrated that during some BPA exceedances, ozone levels are affected by emissions from the HG area, and that the HG area emissions prevent BPA from attaining the 1-hour ozone standard prior to the time HG implements all measures necessary for HG to attain the 1-hour standard.

EPA recalculated the estimate of the future design values based solely on modeled days when winds are not coming from HG. The results indicate that the local measures in BPA are adequate to show attainment on days when transport is not an issue. This confirms that BPA has done all that they can to address the local portion of their nonattainment problem.

EPA's review of the number of days when there is an exceedance in BPA for the 1990-94 data shows 41 exceedances in the BPA area, of which 16 days are when winds are from the HG area. This is more than 3 exceedances per year (three being the maximum number of exceedances allowed to still be in attainment) for BPA which are influenced by transport from HG. Given the two areas are less than 24 hours transport from each other, and the life time of ozone and its precursors, it is reasonable to believe ozone observations and emissions emitted in HG will arrive in BPA within 24 hours. This argument alone closely links the two areas. Modeling which eliminated the HG emissions and

resulted in 10-30 ppb change in ozone levels in BPA, as documented in the TSD, shows HG is having a major impact on BPA's ability to attain the 1-hour ozone standard. BPA has adopted and will be implementing local regulations that modeling demonstrates would eliminate exceedances on those days when transport is not involved, but which will not be able to bring about attainment because transport would continue to cause a sufficient number of exceedances such that violation of the standard would continue. Transport from the HG area will prevent the BPA area from attaining. See our responses in Section (A), comments 1, 5, 10, 11, 16 and 17, regarding EPA's standard for determining the contribution of transport to the BPA area. Furthermore, EPA's Transport Policy supercedes EPA's earlier Overwhelming Transport Policy. See the response in Section (A), comments 15 and 16.

C. Comments Received in Response to December 27, 2000, Notice.

Twenty-seven documents were received in response to the December 2000 notice. Twenty-six documents supported the proposed rule. These are summarized and addressed as comment 1. One document contained comments adverse to the proposed rule. The comments in that document are listed and responded to individually as comments 2 through 21.

Comment 1: Twenty-six documents were received in support of various aspects of the December 27, 2000, proposal to extend the ozone attainment date for the BPA ozone nonattainment area to November 15, 2007, while retaining the area's current classification as a moderate ozone nonattainment area. The commenters supported the EPA technical opinion that Texas has demonstrated that during a significant portion of BPA exceedances, ozone levels are affected by emissions from the HG area, and that the HG area emissions affect BPA's ability to attain the 1-hour ozone standard. Many stated their belief that the technical basis and legal rationale are sound.

Response 1: The EPA is in general agreement with the commenters who support the proposed actions in our December 27, 2000, NPR. A number of the commenters appropriately stated opinions such as: "By proposing to extend BPA's ozone attainment date, EPA has rightfully exercised its July 16, 1998 policy regarding attainment date extensions for downwind transport areas. The technical basis and legal rationale for extending a downwind transport area's attainment date were clearly articulated in EPA's July 1998 policy memorandum and in its response to comments regarding similar proposals to extend the attainment dates of the Western Massachusetts, Washington, D.C., and Connecticut nonattainment areas." The previous responses to comments detail our interpretation of the transport policy, our

rationale for granting attainment date extensions for nonattainment areas located downwind of nonattainment areas that have attainment dates later than the downwind areas, and the relation of these interpretations to the CAA.

Comment 2: BPA has failed to attain. EPA has a statutory duty to determine that BPA has failed to meet the November 15, 1996 attainment deadline for moderate ozone areas. EPA has been in violation of the Act since that date, and is subject to a lawsuit requesting a court to order the agency to act on the finding of non-attainment. [T]he ambient air quality data demonstrate clearly that the BPA area did not meet the ozone standard and that air quality is continuously and steadily deteriorating from 1996 to today. BPA has continued to experience ozone exceedances each year since 1996 through 2000, which indicates the need for the area to adopt a stringent SIP. BPA should have been notified of their failure to attain no later than May 15, 1997. Contingency measures should have been implemented immediately, and the area reclassified from moderate to serious.

Response 2: EPA believes it is fulfilling its duties under the Clean Air Act by applying the attainment date extension to the BPA area, or in the alternative, proposing to reclassify the area.

In the proposed rulemaking published on April 16, 1999 (64

FR 18864), we proposed, as one alternative, to find, pursuant to section 181(b)(2) of the Clean Air Act, that the BPA area had failed to attain the ozone one-hour NAAQS by the date prescribed under the Act for moderate ozone nonattainment areas, or November 15, 1996. If we were to finalize such a finding, we would then have published a notice that the BPA area is reclassified from moderate nonattainment to serious nonattainment.

Alternatively, we proposed to extend the area's attainment date, providing that Texas meet the criteria of our July 16, 1998 transport policy, "Guidance on Extension of Attainment Dates for Downwind Transport Areas." We stated that if Texas submitted a SIP that met the July 1998 transport policy, we would issue in a Federal Register notice a supplemental proposal to extend the BPA area's attainment date as appropriate. Further, if Texas did not submit a SIP that met the July 1998 transport policy, or failed to submit a SIP, we would finalize the proposed finding of failure to attain, and the BPA area would be reclassified as a serious ozone nonattainment area.

The July 16, 1998, policy memorandum entitled "Guidance on Extension of Air Quality Attainment Dates for Downwind Transport Areas," outlines the criteria by which the attainment date for an area may be extended. Following this guidance, and in consideration of the evolution of our understanding of ozone formation and transportation, EPA proposed the actions in the

April 19, 1999, and the December 27, 2000, Federal Registers. The issues of the legality of the transport guidance and the guidance's relation to the CAA have been discussed in the responses to the March 25, 1999, notice, and are incorporated herein insofar as relevant. See Section VIII (A).

Overall, the BPA air quality has not steadily deteriorated over time, as stated by the commenters. TNRCC analyzed the historic air quality in the BPA ozone nonattainment area for the period of 1975 to 1999. While there is the expected sawtooth spread of data (due primarily to meteorologic time specific fluctuations) the analyses demonstrate that the area's ozone design value exhibits a general decrease since 1975 (this can be seen on Figure 6.3-2 of the April 25, 2000 BPA SIP submission). This downward trend is almost as great for the period 1991-1999 as for the earlier period. It is EPA's technical opinion that this long-term downward trend is likely to continue. addition, the air quality will keep improving due to substantial reductions in precursor emissions in both HG and BPA, due to both state and federal emission control requirements. This includes the impacts of the implementation of the NOx RACT and beyond-RACT NOx rules for the BPA area.

The BPA area is implementing local measures by 2005. The schedule is based on time necessary for the engineering and installation of control equipment on point sources during their

regular maintenance and down times. This period must be as soon as possible, but such that BPA does not incur an economic hardship. This timing is appropriate and expeditious. Further, EPA recalculated the estimate of the future design values based solely on modeled days when winds are not coming from HG. The results indicate that the local measures in BPA are adequate to show attainment on days when transport is not an issue. This confirms that BPA has done all that they can to address the local portion of their nonattainment problem.

EPA's review of the number of days when there is an exceedance in BPA for the 1990-94 data shows 41 exceedances in the BPA area, of which 16 days are when winds are from the HG area. This is more than 3 exceedances per year (three being the maximum number of exceedances allowed to still be in attainment) for BPA which are influenced by transport from HG. Given the two areas are less than 24 hours transport from each other, and the life time of ozone and its precursors, it is reasonable to believe ozone observations and emissions emitted in HG will arrive in BPA within 24 hours. This argument alone closely links the two areas. Modeling which eliminated the HG emissions and resulted in 10-30 ppb change in ozone levels in BPA, as documented in the TSD, shows HG is having a major impact on BPA's ability to attain the 1-hour ozone standard.

Texas has benefitted from the OTAG/NOx SIP call experience.

From this modeling we gained a better understanding of the role NOx emissions play in the formation and transport of ozone. Earlier we had thought local VOC was the major contributing factor, but through the regional modeling and other analyses being conducted during that time period we learned that NOx is a significant contributor and has much longer transport distance than earlier envisioned. As a result TNRCC improved, through regional modeling to develop boundary conditions, the manner in which transported NOx is treated. Also, during this time period they benefitted from improvements in our emissions inventories and updates to the carbon bond IV chemistry in the model (e.g., improvement in the isoprene chemistry). These improvements were necessary for us to understand the ozone problem in the BPA area.

Texas' conclusions regarding transport from the HG area were not a product of the OTAG or NOx SIP call modeling. However,

TNRCC did use the time during which OTAG met to better understand the land/sea breeze phenomenon which has added a level of complexity to the HG and BPA analysis not seen anywhere else in the country. Emissions and ozone in the HG and BPA areas are emitted into the local atmosphere where ozone formation begins, transported out over the warm air over the Gulf of Mexico where the warmer temperatures further activate the chemistry to form more ozone which is then transported back inland over both areas. So far, our meteorological models have not been able to

accurately simulate this process. However, our understanding of what is happening has improved to the degree that we at least know better how to interpret the photochemical model results.

It is EPA's technical opinion that based on the weight-of-evidence and the modeling, the State's control strategy should provide for attainment by November 15, 2007.

Comment 3: EPA cannot invent rationales for the state. EPA concedes that the state has failed to adequately justify rejection of identified measures as RACM. Rather than disapproving the SIPs on that basis, however, EPA proceeds to provide its own rationales for why the states might have decided to reject these measures as RACM. EPA has no authority to proceed in this manner. The Act and EPA guidance require the states to perform the required RACM analysis, and to justify their rejection of any available control measures. EPA's role is limited to reviewing what the states have submitted, and approving or disapproving it. 42 U.S.C. §7410(k)(3); Riverside <u>Cement Co. v. Thomas</u>, 843 F.2d 1246 (9th Cir. 1988). EPA "may either accept or reject what the state proposes; but EPA may not take a portion of what the state proposes and amend the proposal ad libitum." Id. The approach EPA is proposing is nowhere authorized by the Act. It also conflicts with the Act's requirement that SIP revisions be subjected to public notice and hearing at the state level before submission to EPA. 42 U.S.C.

\$7410(a)(1). If states are going to reject control measures, their decision to do so and the rationale therefor must be subject to notice and hearing at the state and local level. Indeed, EPA's own guidance emphasizes the importance of local determinations of the feasibility of specific measures as RACM. 57 Fed. Reg. at 13560.

Response 3: The State adopted all the measures, including the additional more stringent point source rules, it believed necessary for meeting the RACM requirement under section 172(c)(1). During the State's public comment periods on the overall SIP and its supporting rules, commenters raised the RACM requirement for the point source rules only. Commenters believed that there was no need for the more stringent point source rules. The State addressed the comment and explained why the beyond-RACT point source rules were necessary for attainment and were RACM for the BPA area. The EPA by reviewing a particular small subset of non-adopted control measures is not amending the SIP; EPA analyzed the non-adoption of this particular small sub-set of control measures and is approving the SIP with a conclusion that it was acceptable for the State to not adopt any further additional measures to meet the RACM requirement of the Clean Air Act.

The commenter cites <u>Riverside Cement</u> for the proposition that EPA cannot perform an analysis of whether the State's plan

complies with the CAA's RACM requirement. The EPA believes that the holding of that case is inapplicable to these facts. In Riverside Cement, EPA approved a control requirement establishing an emission limit into the SIP and disregarded a contemporaneously-submitted contingency that would allow the State to modify the emission limit. Thus, the court concluded that EPA "amended" the State proposal by approving into the SIP something different than what the State had intended. 843 F.2d at 1248.

In the present circumstances, EPA did not attempt to modify a substantive control requirement of the submitted plan. Rather, EPA performed an additional analysis of a small sub-group of measures to determine if the plan, as submitted, fulfilled the substantive RACM requirement of the Act. The statute places primary responsibility on the States to submit plans that meet the Act's requirements. However, nothing in the Act precludes EPA from performing those analyses, and the Act clearly provides that EPA must determine whether the State's submission meets the Act's requirements. Under that authority, EPA believes that it is appropriate, though not mandated, that EPA perform independent analyses to determine whether a submission meets the requirements of the Act. The EPA has not attempted to modify the State's submission by either adding or deleting a substantive element of the submitted plan. By virtue of the supplemental RACM analysis,

EPA has concluded that the State's submission contains control measures sufficient to meet the RACM requirement. EPA also believes the State's hearings sufficiently addressed the fact that the State had not included additional control measures as RACM. This is further supported by the fact that no adverse comments were received raising the need for additional RACM.

Comment 4: Inappropriate grounds for rejecting RACM.

Comment 4(a): EPA's grounds for rejecting measures as RACM are inappropriate. EPA employed the following three grounds for rejecting measures as RACM: a) the measures are likely to "require an intensive and costly effort for numerous small area sources"; b) "due to the small percentage of mobile source emissions in the over-all inventory, some are not cost-beneficial," and c) "since the BPA [Beaumont/Port Arthur] area relies in part on reductions from the upwind HG [Houston/Galveston] area which are substantial, and the reductions projected to be achieved by the evaluated additional set of measures are relatively small, they would not produce emission reductions sufficient to advance the attainment date in the BPA [Beaumont/Port Arthur] area and, therefore, should not be considered RACM." None of these grounds are legally or rationally sufficient bases for rejecting control measures.

Response 4(a): The EPA's approach toward the RACM requirement is grounded in the language of the Clean Air Act.

Section 172(c)(1) states that a SIP for a nonattainment area must meet the following requirement, "In general .- Such plan provisions shall provide for the implementation of all reasonably available control measures as expeditiously as practicable (including such reductions in emissions from existing sources in the area as may be obtained through the adoption, at a minimum, of reasonably available control technology) and shall provide for attainment of the national primary ambient air quality standards." [Emphasis added.] The EPA interprets this language as tying the RACM requirement to the requirement for attainment of the national primary ambient air quality standard. The Act provides that the attainment date shall be "as expeditiously as practicable but no later than * * *" the deadlines specified in the Act. EPA believes that the use of the same terminology in conjunction with the RACM requirement serves the purpose of specifying RACM as the way of expediting attainment of the NAAQS in advance of the deadline specified in the Act. As stated in the "General Preamble" (57 FR 13498 at 13560, April 16, 1992), "The EPA interprets this requirement to impose a duty on all nonattainment areas to consider all available control measures and to adopt and implement such measures as are reasonably available for implementation in the area as components of the area's attainment demonstration." [Emphasis added.] In other words, because of the construction of the RACM language in the

CAA, EPA does not view the RACM requirement as separate from the attainment demonstration requirement. Therefore, EPA believes that the Act supports its interpretation that measures may be determined to not be RACM if they do not advance the attainment date. In addition, EPA believes that it would not be reasonable to require implementation of measures that would not in fact advance attainment. See 57 FR 13560.

The term "reasonably available control measure" is not actually defined in the definitions in the Act. Therefore, the EPA interpretation that potential measures may be determined not to be RACM if they require an intensive and costly effort for numerous small area sources is based on the common sense meaning of the phrase, "reasonably available." A measure that is reasonably available is one that is technologically and economically feasible and that can be readily implemented. Ready implementation also includes consideration of whether emissions from small sources are relatively small and whether the administrative burden, to the States and regulated entities, of controlling such sources was likely to be considerable. As stated in the General Preamble, EPA believes that States can reject potential measures based on local conditions including cost. 57 FR 13561.

Also, the development of rules for a large number of very different source categories of small sources for which little

control information may exist will likely take much longer than development of rules for source categories for which control information exists or that comprise a smaller number of larger sources. The longer the time frame for development of rules by the State would decrease the possibility that the emission reductions from the rules in the nonattainment area would advance the attainment date earlier than would be achieved from the larger amount of reductions expected from the upwind controls of the HG area with a later statutory attainment date.

Similar to the above analysis, the EPA interpretation that potential mobile source measures may not be RACM if they represent a small percentage of mobile source emissions in the over-all inventory, is again based on the fact that these measures could not advance the attainment date. For instance, as detailed in the Technical Support Document (TSD) for this proposed action, when compared to emission reductions necessary for attainment, the emission reductions from transportation control measures (TCMs) that could potentially be implemented are only a small percentage (3.3% for NOx) of emission reductions needed. From this analysis, EPA concludes that implementation of these TCMs would not produce emission reductions sufficient to advance the attainment date.

Comment 4(b): EPA's approach also illegally assumes that the attainment dates for these areas can be extended beyond

November 15, 1999 via the Agency's downwind transport policy. Once an attainment deadline has passed, EPA must require SIPs to include all available control measures to provide for attainment as soon as possible. <u>Delaney v.EPA</u>, 898 F.2d 687 (9th Cir. 1990).

Response 4(b): As noted above, EPA concluded that RACM is linked in the language of the Clean Air Act to the attainment date. We elsewhere respond to comments that object to EPA's approval of attainment date extensions and do not restate those responses here. See Section VIII(A). Once an attainment date is set for an area, an analysis can then be made to determine whether any additional measures that may potentially be RACM would advance that attainment date. EPA is setting November 15, 2007 as the attainment date for the BPA area. We do not consider measures as RACM for the BPA area if they do not advance that attainment date. We are requiring the State to demonstrate that all local measures that are RACM are implemented as expeditiously as practicable, however.

Comment 5: Failure to quantify reductions needed to attain sooner. Even if advancement of the attainment date were a relevant test for RACMs, EPA has failed to rationally justify its claim that additional RACMs would not meet that test. To begin with, neither the Agency nor the state have quantified in a manner consistent with EPA rules and guidance the emission

reductions that would be needed to attain the standard prior to achievement of emission reductions required under the NOx SIP call.

Response 5: Elsewhere in this response to comments on the proposed approval of the 1-hour ozone SIP, EPA addresses the issue of the attainment date extension. See Section VIII(A). that section, EPA justified the position that areas affected by transport may need additional time to attain, and in some cases may need an extension out to either the date the NOx SIP call will be implemented (where applicable) or the attainment date of an upwind area if it cannot attain without the reductions from the upwind area. Please note that while the commenter makes reference to the NOx SIP call, Texas is actually not included in the NOx SIP call. However, it should also be noted that even though they were not included, Texas still showed that transport from areas outside of the BPA area, but within the State including attainment areas, contribute to exceedances in the BPA Therefore, Texas included control measures for regional emissions reductions (including in attainment areas) as part of the BPA attainment demonstration SIP, in a manner similar to those undertaken by the states included in the NOx SIP call.

For the case where the upwind area, e.g., the HG area, precludes the downwind area (e.g., BPA) from reaching attainment, it would be futile to perform analyses of whether additional

emission reductions in the BPA nonattainment area itself (whether RACM or beyond RACM) would advance the attainment date when it is already demonstrated through the BPA/HG specific modeling that the BPA area cannot attain sooner than the upwind HG nonattainment area, with any combination of local measures. In addition, with regard to the local attainment modeling for the BPA area's self-generated exceedances, all local measures needed for expeditious attainment, are already or will soon be implemented. EPA considers the implementation of the local control measures (i.e., the measures within the BPA area itself) to be as expeditious as practicable. Issues concerned with timing of implementation of additional measures are also discussed above. As noted previously, EPA cannot technically distinguish which particular emissions reductions in the HG area would contribute to attainment in the BPA area.

Comment 6: Inadequate RACM analysis. EPA's RACM analysis is grossly inadequate in several key respects.

Comment 6(a): The Agency fails to provide the technical basis and calculations by which it developed its emission reduction estimates for various RACMs.

Response 6(a): EPA's RACM analysis (Appendix C to the TSD for the December 27, 2000 notice) did provide the technical basis and calculations for its emission reduction estimates for controls possible for the source categories in the emission

inventory. The technical basis for the analyses and the assumptions used in the calculation of estimated emission reductions for TCMs were derived from a review of the literature on the implementation and effectiveness of TCM's.³ The TCMs evaluated depend on the level of implementation. Implementation variables, representing levels of implementation effort, are implicit in the range of effectiveness for each category of TCM. EPA does not believe it is necessary, or even possible, to evaluate every explicit variation of TCM's in order to adequately determine if it is reasonably available. EPA believes that using the midpoint level of effectiveness represents a level of implementation effort that is not so high as to be economically infeasible, nor so low as to be ineffective.

Comment 6(b): EPA's analysis looks at only a small universe of potential measures as RACM, and does not evaluate all of the measures identified in public comment and other sources. Among the controls ignored by the EPA analysis are: a) expansion and increased stringency of I/M; b) diesel I/M; c) expanded remote sensing programs; d) CARB diesel fuel standards; e) clean fuel vehicle programs; f) lawn equipment replacement programs, adoption of SCAQMD controls for VOC and NOx sources; g) adoption of the SCAQMD rule requiring conversion of many diesel fleets to

³ Transportation Control Measures: State Implementation Plan Guidance, US EPA 1992; Transportation Control Measure Information Documents, US EPA 1992; Costs and Effectiveness of Transportation Control Measures: A Review and Analysis of the Literature, National Association of Regional Councils 1994.

alternative fuel or clean diesel/hybrid technologies; h) elimination of solvent decreasing; i) limits on pesticide application during the ozone season; j) source reduction for discharges to sewage plants; improved rule-effectiveness measures; k) enhanced Stage II vapor recovery enforcement; l) NOx RACT to 25 tons per year; and m) statewide NOx limits. See, e.g., letter of July 6, 1999 to Gregg Cooke, EPA Region 6, the November 15, 2000 comments by David Baron to EPA Region 3, and his prior comments to EPA Region 3 on the Washington, D.C. SIP. It is arbitrary and irrational for EPA to assume that these measures can and will be implemented in complete isolation from one another.

Response 6(b): EPA's RACM analysis was intended to address all potential categories of stationary and mobile sources that could provide additional emission reductions that might be considered RACM. The commenter mentions a long list of measures they believe were ignored by the EPA in its analysis. However, the EPA did consider a wide range of measures, including appropriate measures from the commenters' listing, and the measures mentioned by the commenters were either not considered to be technically or economically feasible in the BPA area's situation or would not advance attainment. Examples include:

O Expansion and increased stringency of I/M - In 40 CFR section 51.350(a)(4) requires only urbanized areas with

population of more than 200,000 to implement an I/M program, unless that area is in the ozone transport Region. final rulemaking on this, EPA said, "the 200,000 population cut-off for basic programs is authorized by the Act because sections 182(a)(2)(B)(i) and 182(b)(4) require implementation only of an I/M program no less stringent than that required under pre-1990 EPA I/M guidance. EPA's pre-1990 I/M quidance required implementation of basic I/M programs only in urbanized areas of 200,000 population. It is true that some moderate areas would not be required to implement I/M programs if their population were under 200,000, despite the fact that section 182(b)(4) requires a basic I/M program in all moderate areas. However, the basic program that is required is a program that applies only to areas of 200,000 or more population." 60 FR 48032, 48033 (September 18, 1995). To now require I/M under the guise of a RACM analysis would contradict the flexibility intended by promulgation of the regulation and thwart the intent of Congress. Implementation of an I/M program would not advance the attainment.

O Diesel I/M - Due to the state of instrumentation and certification, this type of program is not presently technically and economically feasible for the BPA area and as such is not RACM.

- O Expanded remote sensing programs Remote sensing would not provide sufficient emission reductions to justify the cost of the implementation, nor would it advance attainment, for the BPA area.
- CARB diesel fuel standards Texas has passed a low emission 0 diesel program similar to the California diesel program and has submitted that program along with a request for a waiver of federal preemption under 211(c)(4)(C) of the CAA. Texas program goes beyond the California program in that it also controls cetane, in addition to sulfur and aromatic hydrocarbons. If approved by EPA, it would apply in the BPA area. It should be noted that the Texas Legislature is considering a measure that would void this regulation. April 23, 2001, the Texas House of Representatives Environmental Regulation Committee reported favorable on Texas House Bill 2649. Currently, section 2 of this Bill amends section 382.037(g) of the Texas Health and Safety Code. If passed by both houses of the Texas Legislature and signed by the Governor, this measure will preclude TNRCC from adopting any fuel control measure. While any loss in emissions reductions from this measure would have to be offset by Texas, lack of legislative authority would be valid rationale for not including fuel controls as reasonably available. In addition, currently, EPA is in the

process of performing a comprehensive review and analysis of data to quantify the emission reduction effects of low emission diesel fuels. The outcome of this evaluation could result in a need to reconsider the emission reduction estimate used by the State in their low emission diesel rule. We expect the evaluation process to be completed by May of 2001. If the results of EPA's evaluation indicates that Texas has overestimated the emission reductions attributable to their low emission diesel rule, this measure may no longer be considered reasonably available (depending on the cost associated with low emission reductions). would work with the State to address any shortfall in emission reductions that may be realized because of results from the evaluation. However, due to transport from HG this control measure would not advance the attainment date in the BPA area, and the modeling demonstrates that it is not needed to address the local contribution.

- O Clean Fuel Vehicle programs Texas currently has a Clean Fleet Program substitute plan that exceeds the emissions reductions requirements of the Federal Clean Fuel Fleet program. EPA recently approved this program and it is in effect in the BPA area (66 FR 9203, dated February 7, 2001).
- O Lawn equipment replacement Combining the economic impact on individuals with a small reduction in emissions with the

difficulty in enforcement results in a finding that this measure would not be RACM.

The responses for the other items listed by the commenters are similar. As with the diesel and clean fuel vehicle programs listed by the commenters, the State has gone beyond requirements in several programs. EPA recognizes that many control measures, particularly TCMs, are more effective if done in conjunction with others. EPA maintains that it has considered appropriate measures for RACM for the BPA area. EPA also maintains that it would be impossible to analyze a seeming infinite set of measures for possible benefits. The EPA's analysis did look at all appropriate measures in various applicable categories and concluded that as a whole these categories and/or measures would not advance attainment or would otherwise not be reasonably available, for the BPA nonattainment area.

Comment 7: Stationary sources: The analysis of potential emission reductions from additional stationary source RACMs is flawed in several key respects.

Comment 7(a): EPA arbitrarily excluded from consideration a base percentage of the stationary source categories at smaller facilities. EPA asserts that this exclusion was based on the assumption that the contribution from these categories "would be considered too small and too numerous to regulate individually." This is an arbitrary basis.

Response 7(a): EPA does not consider this exclusion (the bottom 20%) to be based on an arbitrary assumption, since it was designed to eliminate from consideration controls on a number of source categories that were not expected to yield many emission reductions. The EPA believed that controls on categories with very low emission reduction potential would not constitute RACM. The fact that the top 80 percent of the categories considered for additional controls yielded minimal (maximum 2.5 tpd) emissions reductions, validates EPA's decision not to analyze separately the bottom 20 percent of the categories, which would cumulatively have achieved fewer emission reductions. Therefore, EPA concludes that control measures applied to the bottom 20 percent of the categories are not RACM. In the case of NOx controls for stationary sources in BPA, Texas is controlling emissions beyond levels that EPA has previously approved as RACT (defined by EPA as the lowest achievable emission rate considering technical and economic feasibility and therefore considered RACM for major sources) for utility and industrial boilers and process heaters.

Comment 7(b): Second, EPA did not consider potential additional controls on electric generating units and point source combustion sources. EPA offers no explanation for this exclusion. If the Agency is assuming that these sources are already controlled to RACT levels, that assumption is not supported by the record.

Response 7(b): EPA does believe the record supports that RACT was in place on electric generating units and point sources. The EPA proposed conditional approval of BPA NOx RACT on October 28, 1999 (64 FR 58011), and published final conditional approval on March 3, 2000 (65 FR 11468). A direct final notice converting the conditional approval to a full approval was published September 1, 2000 (65 FR 53172). This process included two public comment periods in which no adverse comments were received.

Undoubtedly there are additional controls that could be placed on electric generating units and point source combustion sources. However, EPA believes that: (1) the implementation of the RACT requirements in the BPA nonattainment area; (2) Texas' regional measures providing for additional 50% NOx reductions at electrical generating facilities in Central and Eastern Texas (which will affect the nonattainment area in general), and; (3) the beyond-RACT emission specifications for Electric Utility Boilers and industrial boilers and certain process heaters in the BPA area; provide a level of control that represents all reasonably available controls for these types of sources in the BPA area in question.

The EPA believes that generally, the level of NOx emissions control required under Texas' local and regional measures (similar to the NOx SIP call requirements in other parts of the

U.S.), including controls for electric generating units (above), industrial, commercial, and institutional boilers, water heaters, small boilers and certain process heaters, is greater than the level of control presumed to be RACT by EPA under the NOx RACT requirement. EPA acknowledges that additional controls with higher costs are available and may be cost-effective for areas other than the BPA area. Also, the control costs may not reflect other concerns for the BPA area, regarding reasonableness of control. If control levels greater than those provided by the RACT and the beyond-RACT stationary control measures already or about to be implemented were to be adopted for the BPA area, the EPA believes they would not advance the attainment date for the BPA area, particularly since this area relies heavily on NOx controls from upwind (HG area) sources, and further local reductions within this BPA area are not needed to address local contribution. Therefore, EPA has determined that such additional controls on electric generating units and point source combustion sources do not constitute RACM.

Comment 7(c): EPA assumes that only a 44% (32-58% range) level of control is achievable for the uncontrolled emissions for industrial boilers and process heaters at 19 large stationary sources (4 refineries reduce their NOx by 58% and 15 chemical plants reduce NOx by 32%). This completely unsupported claim is hard to fathom.

Response 7(c): The EPA established guidance to States in complying with the Clean Air Act's requirements for NOx RACT in the NOx Supplement to the General Preamble (57 FR 55620, November 25, 1992). That guidance addressed RACT for major stationary sources of NOx. Under section 182(b)(2) of the Act, moderate and higher ozone nonattainment area SIPs (and also SIPs for all areas in the Ozone Transport Region) were already required to contain provisions for applying a reasonably available level of control for NOx for major stationary sources. As discussed in the previous response to comment, EPA approved RACT levels for the BPA area.

For NOx emission control for other sources, when EPA published the NOx SIP call (63 FR 57402, October 27, 1998), EPA evaluated other levels of NOx control for categories of stationary sources that were not included in the highly cost-effective controls assumed for establishing the level of control reflected in the Statewide NOx emission budgets in that rule. The EPA determined that for area sources, additional NOx controls that were technologically feasible and highly cost-effective could not be identified. The EPA determined that for small point sources, their collective emissions were relatively small and the administrative burden, to the States and regulated entities, of controlling such sources of NOx was likely to be considerable.

Nonetheless, for the purpose of the RACM analysis, EPA did assume

a level of control for sources of NOx with potential for control. In light of the lower level of confidence in information concerning NOx controls on these sources, and the conclusion concerning cost effectiveness, however, EPA believed it had to take a more conservative approach.

The additional local BPA area control measures the State implemented results in a 44 percent level of control for the BPA The EPA believes this level is reasonable in light of the area. analysis performed for the General Preamble, the SIP call, and the BPA RACT approvals. In addition, this level is consistent with EPA guidance issued on March 16, 1994 which states that NOx RACT is generally expected to achieve a 30-50% reduction. EPA further believes the 44 percent level of control is sufficient to bring the BPA area into attainment by the attainment extension date of November 15, 2007. This 44 percent reduction is the amount achieved by aggressive combustion modifications, and was termed "Tier I" level of controls by the State. The TNRCC also considered a "Tier II" level of controls that would have required extensive add-on controls such as Selective Catalytic Reduction The modeling showed Tier II controls were not necessary for BPA to reach attainment for 1-hr ozone NAAQS. In addition, the HG area will be implementing major reductions in emissions to support attainment. Those "regional" reductions are needed for the BPA area to attain the NAAQS for ozone. Therefore, further

controls in the BPA area will not advance the attainment date and are not necessary.

Comment 8: Transportation Control Measures as RACM: EPA gives virtually no consideration to the emission reduction benefits of transportation programs, projects and services contained in adopted regional transportation plans (RTPs), or that are clearly available for adoption as part of RTPs adopted for a nonattainment area. In addition, it is arbitrary and capricious for EPA not to require as RACM economic incentive measures that are generally available to reduce motor vehicle emissions in every nonattainment area.

Response 8: EPA's RACM analysis performed for the December 27, 2000, notice (Included in the TSD for the proposed rule) does consider transportation programs, projects and services that are generally adopted, or available for inclusion in a nonattainment area's regional transportation plan (RTP) and Transportation Improvement Program (TIP). The RACM analysis includes seven broad categories covering twenty-seven subcategories of Transportation Control Measures (TCMs) that represent a range of programs, projects and services that can be included in RTPs and TIPs. The inclusion of a TCM in an RTP or TIP does not necessarily mean that it meets EPA's criteria for RACM and must be included in the SIP. EPA has concluded that implementation of these TCMs would not advance the attainment date for the BPA

area, and therefore are not considered RACM for purposes of the attainment SIPs for that area .

Some of these TCMs, such as parking cashout, transit subsidies, and parking pricing, are explicitly economic incentive programs. Furthermore, these categories of TCMs, as well as most of the others, could be infinitely differentiated according to criteria, such as the method of implementation, level of promotional effort or market penetration, stringency of enforcement, etc. The application of economic incentives to increase the effectiveness of a TCM is one such criterion. implementation variables, representing levels of implementation effort, are implicit in the range of effectiveness for each category of TCM. EPA does not believe it is necessary, or even possible, to evaluate every explicit variation of TCMs in order to adequately determine if a it is reasonably available. believes that using the midpoint level of effectiveness represents a level of implementation effort that is not so high as to be economically infeasible, nor so low as to be ineffective.

Also, there are many important reasons why a state, regional, or local planning agency might implement TCMs in an integrated traffic management plan beyond whatever air quality benefits the TCMs might generate, including preserving open space, water shed protection, avoiding sprawl, mitigating

congestion, and "smart growth" planning generally. So the fact that TCMs are being implemented in certain ozone nonattainment areas does not necessarily lead one to the conclusion that those TCMs represent mandatory RACM measures when they are analyzed primarily for the purpose of determining whether they would advance the ozone attainment date.

Due to the smaller number of mobile sources and vehicle miles traveled (VMT) in the BPA area, mobile source NOx emissions amount to less that 20% of the total NOx emissions for the BPA area. As such, small changes resulting from implementation of additional TCMs have a negligible effect on ozone reduction and will not contribute to acceleration of the attainment date for the BPA nonattainment area.

wide range of potential measures as RACM for this area, and understating the potential benefits of others, EPA asserts that available measures would not advance the attainment date in BPA because: a) The area relies heavily on control of transported emissions and ozone; and b) The modeling indicates that NOx reductions are generally more beneficial in reducing ozone levels, suggesting that the area may be NOx limited. The first point is truly irrelevant to the RACM inquiry, for all the reasons set forth above. Even if the issue is whether additional measures could advance the attainment date, that inquiry is not

informed by whether the area might attain by November 15, 2007, but by whether it could attain sooner than November 15, 2007. As to the second point, the modeling does not show that NOx reductions are inherently more beneficial. They merely show that under some circumstances - generally involving very substantial NOx reductions (e.g., 60% cuts or larger) - NOx reductions might provide greater benefits per ton. The same model shows that NOx reductions can sometimes actually lead to increased ozone levels in some cells. Even if the ozone problem in the BPA area is NOx limited, that hardly justifies eschewing additional measures as RACM - at most it would suggest focusing more heavily on additional measures for NOx sources as RACM.

Response 9: The sensitivity analyses that were performed by the State of Texas with the photochemical grid model for the BPA area showed that, even with small NOx emission reductions, the ozone benefits achieved are substantially greater than the minor ozone benefits achieved from similar VOC emission reductions.

Also, the results of the attainment demonstration modeling conducted by the State specifically indicate that NOx control is particularly effective in reducing ozone levels in the BPA area. Therefore, EPA stands by its technical position that the levels of VOC reductions in the BPA area that could be achieved by additional stationary and mobile source control measures that are potentially RACM would not improve ozone levels to the point that

would result in advancing the attainment date. Furthermore, EPA's analysis demonstrated that the source categories that were available for mobile NOx controls were considered too few (even with the area's ability to benefit from NOx controls) to advance the attainment date.

Also, EPA's analysis of levels of NOx reductions in the BPA area that could be achieved by additional stationary source controls that are potentially RACM would have to come from a large number of small sources where EPA does not have much guidance for control, and therefore would be costly to develop. Further, implementation of these potential measures for both VOC and NOx would not advance the attainment date due to the substantial reductions needed in the HG area. Therefore, EPA concluded that additional controls on the source categories evaluated for both VOC and NOx should not be considered RACM.

The HG nonattainment area is classified severe-17 with an attainment date of November 15, 2007, whereas the BPA nonattainment area is classified as a moderate area. EPA is approving an attainment date extension for the BPA area precisely because the modeling shows that additional controls coming from outside the BPA area itself are needed for the BPA area to come into attainment. Other reasons why EPA does not consider additional measures to be RACM for the BPA area are discussed elsewhere in these responses to comments. Also, refer to

previous responses to comments concerning the BPA attainment date and advancing an attainment date due to transport.

Comment 10: EPA's 1998 Transport Policy: Commenters believe that the so-called "July 1998 transport policy" is legally and technically flawed and must not be relied upon to allow further delay in responding to the Act's requirements. Assuming arguendo that the "transport policy" is valid, commenters believe that the evidence, information and data available to EPA surrounding the BPA area indicate that transport plays no part in at least a portion of the ozone exceedances observed in the BPA area and thus the transport policy cannot apply, even if transport is a factor in other episodes. Even EPA and the state concede that applying an analysis of back trajectories of air parcels coming into the BPA area from the HG area fails to demonstrate transport effects from HG as the sole cause of higher ozone concentrations in the BPA area. Commenters request the development of an environmental justice analysis and the incorporation of specific measures and accommodations to address the needs of particular communities that are disproportionally affected by exposure to unhealthful air quality.

Response 10: EPA has responded extensively to issues pertaining to the legality and technical applicability of the July 1998 Transport Policy in its March 1999 responses, above.

EPA disagrees with the assertion that even if the July 1998

Transport Policy is valid it does not apply, since transport does not appear to be a significant factor in some of the area's ozone exceedances. The evidence shows that absent adequate controls on transported pollution from the HG area, the BPA area will not attain the standard. The policy requires the BPA area to put in place local control measures to address local contributions to the area's nonattainment problem. However, these measures alone will not bring the BPA area into attainment due to the transport of ozone and ozone precursor compounds from the HG area. Thus, the EPA has determined that the July 1998 Transport Policy is appropriately applied in this case.

In approving the State's request for an attainment date extension for BPA, EPA did not base the decision solely on the State's back trajectory analyses. The State demonstrated the impact of ozone and ozone precursor transport from the upwind HG area counties upon the BPA area through photochemical grid modeling (i.e., CAMx).

EPA recalculated the estimate of the future design values based solely on modeled days when winds are not coming from HG. The results indicate that the local measures in BPA are adequate to show attainment on days when transport is not an issue. This confirms that BPA has done all that they can to address the local portion of their nonattainment problem. EPA's review of the number of days when there is an exceedance in BPA for the 1990-94

data shows 41 exceedances in the BPA area, of which 16 days are when winds are from the HG area. This is more than 3 exceedances per year (three being the maximum number of exceedances allowed to still be in attainment) for BPA which are influenced by transport from HG. Given the two areas are less than 24 hours transport from each other, and the life time of ozone and its precursors, it is reasonable to believe ozone observations and emissions emitted in HG will arrive in BPA within 24 hours. This argument alone closely links the two areas. In addition, five of the 41 exceedances occurred at the same BPA Monitor (BMTC). During four of these execeedances, ozone quality in the HG area on the day before, or the day of, these exceedances ranged from 107 to 140 ppb. These high levels of HG ozone, on days when the winds were from the direction of HG, further link HG area ozone and emissions with BPA exceedances. Modeling which eliminated the HG emissions and resulted in 10-30 ppb change in ozone levels in BPA, as documented in the TSD, shows HG is having a major impact on BPA's ability to attain the 1-hour ozone standard. BPA has adopted and will be implementing local regulations controlling pollution from local sources, but which will not be able to bring about attainment due to pollution caused by transport. Transport from the HG area will prevent the BPA area from attaining.

This is consistent with the criteria in EPA's July 17, 1998

policy memo entitled "Extension of Attainment Dates for Downwind Transport Areas", and demonstrates through modeling that transport from an upwind area with a later attainment date affects the downwind area's ability to attain the standard by its attainment date. The State has demonstrated through modeling that Beaumont-Port Arthur was affected by transport from HG emissions to a degree that affects BPA's ability to attain. In addition to photochemical modeling, the State conducted an analysis of back trajectories to further illustrate the impact of the HG area emissions on the BPA ozone nonattainment area.

The subject of an environmental justice analysis is addressed later in response to a specific comment (see comment 18).

Comment 11: EPA has a duty to reclassify BPA immediately:

The administrative record in this matter includes extensive
correspondence between EPA and the state of Texas over BPA. This
correspondence reflects the air quality status of BPA during the
years 1997 and 1998, and includes express direction from EPA to
Texas to submit a demonstration of overwhelming transport no
later than May 15, 1998. Several years later, no new or
substantive evidence from Texas describing the nature or extent
of any transport is presented. EPA lacks the authority to ignore
non-compliance and interminable foot-dragging. EPA is bound by
the express requirements and structure of the Act and must

reclassify BPA immediately.

Response 11: EPA has responded to issues pertaining to the interpretation of the reclassification requirements of the Clean Air Act and application of those requirements in light of developments since the enactment of the 1990 Clean Air Act in its March 1999 responses, above. See Section VIII(A), specifically the response to comment 1. The EPA is not relying on the overwhelming transport policy; that policy guidance is superseded by the 1998 transport policy . See Section VIII (A) comments 15 The 1998 transport policy reflects the latest science and modeling information, as well as EPA's application of its interpretation of the CAA. The information added by the State in the 1999 and 2000 SIP submissions adds to the record, and more clearly depicts the influence of transport on the ability of BPA to attain the NAAQS for 1-hr ozone levels. Refer to preceding responses and comment number 17 in Section VIII(A). EPA is not ignoring the issue, but has gained a new and improved understanding leading to a more equitable resolution that better executes the will of Congress as embodied in the CAA.

Comment 12: Further delays are inappropriate: EPA proposes to grant Texas time for months and years of further inaction by the proposed rule. Reclassification should occur immediately upon the conclusion of this rulemaking, i.e., by early February 2001. An emergency, partial SIP submittal should be required

immediately which commits to implementing all available control strategies for stop-gap emissions reductions, including the incorporation of whatever improved NOx rules, contingency measures, RACT fix-up and other available control strategies for adoption into a federally enforceable interim SIP. A complete SIP (with attainment demonstration, revised inventories, further enhanced control strategies, etc.) should be developed and submitted no later than 6 months after the final rule is published.

Response 12: EPA responds extensively to the issues of attainment date extension, reclassification requirements, implementation of RACM and other control measures, and the appropriateness of the SIP components submitted by the State of Texas, the subjects of this comment, throughout these responses to comments.

design value is not significantly decreasing, according to monitoring stations. It is experiencing degrading air quality rather than steady improvement. Reclassification to serious is inadequate to reverse this trend, and as EPA notes, BPA cannot realistically be expected to meet the 11/15/99 SIP submittal deadline, much less demonstrate attainment, even though these are the requirements of the Act. Current data demonstrates that the serious classification is not appropriate: BPA should be

reclassified to severe.

Response 13: The BPA design value is decreasing. The 1-hr ozone design value for the three-year period of 1995 through 1997 is 157 ppm, while the design value for the three-year period of 1998 through 2000 is 145 ppm. In addition, overall the design value has been steadily decreasing since 1975. This is demonstrated in the State's Design Value Trend analysis, and is discussed previously in Section VIII (C) response to comment 2.

EPA disagrees with the assessment that BPA should be reclassified to severe. In our April 16, 1999, proposed rule (64 FR 18864) we proposed to find, pursuant to section 181(b)(2) of the Clean Air Act, that the BPA area has failed to attain the ozone 1-hour NAAQS by the date prescribed under the Act for moderate ozone nonattainment areas, or November 15, 1996. Alternatively, in that proposed rule, we proposed to extend the attainment date, providing that Texas meets the criteria of our July 16, 1998, transport policy, "Guidance on Extension of Attainment Dates for Downwind Transport Areas." We stated that if Texas submits a SIP that meets the July 1998 transport policy, we would issue a supplemental proposal in a Federal Register notice to extend the BPA area's attainment date as appropriate. If Texas did not submit a SIP that met the July 1998 transport policy, or failed to submit a timely SIP, we would have finalized the proposed finding of failure to attain, and the

BPA area would be reclassified as a serious ozone nonattainment area.

The State met the requisite criteria and has demonstrated that the BPA area is influenced by transport from the HG area to the extent that BPA can not attain until the HG area attains. Therefore, we are approving the BPA ozone attainment demonstration and, following the criteria of the July 1998 transport policy quidance, are extending the date required for BPA attainment compliance to the appropriate date equal to the attainment date of the upwind source influencing the BPA (downwind) nonattainment. Our previous responses fully address the validity and application of the July 1998 transport policy quidance, and our interpretation of the Clean Air Act and application of those requirements in light of developments since the enactment of the 1990 Clean Air Act. In light of this, it is not appropriate to reclassify the BPA nonattainment area as either serious or severe. Refer to Section VIII(A) comment 13, and Section VIII(C) comments 1 and 2. In any event, if the area were to be reclassified, the statute would call for reclassification to "serious", not severe. Refer to Section VIII(A), response to comment 21.

Comment 14: Reliance on the July 1998 transport policy is inappropriate: EPA's July 1998 transport policy is neither legally valid nor applicable to BPA. It should be ignored and

instead, the Act applied as written.

Response 14: EPA has replied extensively on the validity of the July 1998 transport policy and its applicability to the BPA ozone nonattainment area in previous responses to comments, above, especially Section VIII(A), response to comment 2. Responses in Section VIII(C) (e.g., comment 9, and comment 16 to follow) discuss specifics particular to the BPA area.

Comment 15: If Houston's air pollution is actually being transported to BPA, EPA must make a SIP call to improve the HG SIP: The Act is clear that states are required to develop plans which include sufficient control strategies to mitigate and compensate for the effects of transported air pollutants. § 110(a)(2)(D), 110(k)(5). As noted above, the 7/98 transport policy is backwards: Congress clearly expected that upwind areas would be required to control emissions to the degree that these emissions would not affect downwind areas. The state must adopt whatever controls are necessary for HG to reduce its pollution in a timely fashion and help Beaumont into attainment.

Response 15: EPA has replied extensively on the validity of the July 1998 transport policy and its applicability to the BPA ozone nonattainment area in previous responses to comments, above, especially the responses to the March 1999 Notice - Section VIII(A). In addition, as discussed previously, it is difficult to ascertain which emission reductions an upwind area

might require earlier in order to bring a downwind area into attainment prior to attainment by the upwind area. Moreover, requiring control strategies in the HG area that accelerates that area's attainment date conflicts with Congressional intent to allow the HG area a later attainment date, and based on consideration of what is "practicable."

In response to the commenter's concern that the EPA must make a SIP call to improve the HG SIP, the EPA does not agree. We are currently operating under the Natural Resources Defense Council consent decree (Natural Resources Defense Council v. Browner, Civ No. 99-2976, November 30, 1999) for HG SIP actions. This consent decree essentially is functioning as a SIP call. The State of Texas submitted an attainment demonstration SIP for the HG area, with rules or other enforceable control measures, by December 31, 2000. This attainment demonstration SIP revision is currently under EPA review. Thus, until EPA has ruled on the sufficiency of that SIP submission, a SIP call would be premature. Per the decree, if EPA has not fully approved an attainment demonstration SIP for HG, EPA must by October 15, 2001, propose a Federal Implementation Plan (FIP). Should a FIP be proposed, the EPA must promulgate the FIP by June 14, 2002 to be in compliance with the consent decree. Previous responses found above, including the responses to the March 1999 Notice -Section VIII(A), discuss why the EPA does not believe the Act

requires the HG area to shorten its attainment schedule by adopting and implementing rules on a faster schedule in order to bring the BPA area into attainment sooner. Also, reference the TSD to the December 27, 2000, proposed rule for details of the modeling evidence for transport and BPA nonattainment.

Comment 16: The "Extension" of the attainment date is not warranted by fact or permissible under law: EPA's legal basis for simply adjusting the attainment date under these circumstances is non-existent. Even if there were statutory authority to grant extensions, there is nothing in the notice to suggest that the area has to reduce transport to attain.

Response 16: EPA has replied extensively on the validity of the July 1998 transport policy, the granting of an extension to the attainment date for a downwind nonattainment area, and its applicability to the BPA ozone nonattainment area in previous responses to comments, above, including the responses to the March 1999 Notice - Section VIII(A).

Also, the State has submitted an approvable modeling demonstration with supporting documentation that the BPA area is affected by transport of ozone and ozone precursor compounds from an upwind source, namely the HG area. The submitted documentation successfully demonstrates that this transport from the HG area affects the BPA area's ability to attain earlier than the date that the HG area attains. There is strong evidence to

support the position that the BPA nonattainment area is impacted by transport from the HG area. EPA's review of the number of days when there is an exceedance in BPA for the 1990-94 data shows 41 exceedances in the BPA area, of which 16 days are when winds are from the HG area. This is more than 3 exceedances per year (three being the maximum number of exceedances allowed to still be in attainment) for BPA which are influenced by transport from HG. Given the two areas are less than 24 hours transport from each other, and the life time of ozone and its precursors, it is reasonable to believe ozone observations and emissions emitted in HG will arrive in BPA within 24 hours. This argument alone closely links the two areas. Modeling which eliminated the HG emissions and resulted in 10-30 ppb change in ozone levels in BPA, as documented in the TSD, shows HG is having a major impact on BPA's ability to attain the 1-hour ozone standard. Local attainment modeling for the BPA and HG nonattainment areas shows that the BPA nonattainment area will need controls not only local to the BPA nonattainment area but from upwind sources (the HG area) to demonstrate attainment of the ozone NAAQS. Local modeling for 2007 relies substantively on the HG area reductions (upwind and within the modeling domain) as well as controls being implemented in the BPA nonattainment area. EPA recalculated the estimate of the future design values based solely on modeled days when winds are not coming from HG. The results indicate that the

local measures to be implemented in BPA are adequate to show attainment on days when transport is not an issue. This confirms that BPA has done all that they can to address the local portion of their nonattainment problem. It has been clearly demonstrated that, until the HG nonattainment area implements local controls and comes into attainment, high ozone and precursor emissions from the HG nonattainment area will continue to contribute to exceedances and thwart attainment in the BPA nonattainment area. Reference the TSD to the December 27, 2000, proposed rule for details of the modeling evidence for transport and BPA nonattainment.

Comment 17: Weight-of-evidence Approach is so Poorly

Described and Developed as to constitute a non-technical Analysis for Approving an Extension to 2007: The state's weight-of-evidence determinations are technically flawed and poorly presented in the proposed rulemaking (65 FR 81797 by relying on too many uncertainties, estimates and non-scientific methods, which make this approach entirely unacceptable and illegal. EPA needs to do a comprehensive scientific analysis of the information and not a non-scientific one in making these critical public health evaluations and decisions.

Response 17: Under section 182(b),(c)(2), and (d) of the CAA, moderate ozone nonattainment areas were required to submit by November 15, 1993, and serious and severe ozone nonattainment

areas were required to submit by November 15, 1994, demonstrations of how they would attain the 1-hour standard. Section 182(c)(2)(A) provides that "[t]his attainment demonstration must be based on photochemical grid modeling or any other analytical method determined by the Administrator, in the Administrator's discretion, to be at least as effective." Moderate areas were therefore not required to submit an attainment demonstration SIP based upon photochemical modeling. As described in more detail below, the EPA guidance provides options for states to supplement their photochemical modeling results, with additional evidence designed to account for uncertainties in the photochemical modeling, to demonstrate attainment. This approach is consistent with the requirement of section 182(c)(2)(A) that the attainment demonstration "be based on photochemical grid modeling," because the modeling results constitute the principal component of EPA's analysis, with supplemental information designed to account for uncertainties in the model. This interpretation and application of the photochemical modeling requirement of section 182(c)(2)(A) finds further justification in the broad deference Congress granted EPA to develop appropriate methods for determining attainment, as indicated in the last phrase of section 182(c)(2)(A).

The flexibility granted to EPA under section 182(c)(2)(A) is reflected in the regulations EPA promulgated for modeled

These regulations provide, "The attainment demonstrations. adequacy of a control strategy shall be demonstrated by means of applicable air quality models, data bases, and other requirements specified in [40 CFR part 51 Appendix W] (Guideline on Air Quality Models)." 4 40 CFR 51.112(a)(1). However, the regulations further provide, "Where an air quality model specified in appendix W...is inappropriate, the model may be modified or another model substituted [with approval by EPA, and after] notice and opportunity for public comment...." Appendix W, in turn, provides that, "The Urban Airshed Model (UAM) is recommended for photochemical or reactive pollutant modeling applications involving entire urban areas," but further refers to EPA's modeling quidance for data requirements and procedures for operating the model. 40 CFR 51 App. W section 6.2.1.a. modeling guidance discusses the data requirements and operating procedures, as well as interpretation of model results as they relate to the attainment demonstration. This provision references guidance published in 1991, but EPA envisioned the guidance would change as we gained experience with model applications, which is why the guidance is referenced, but does not appear, in Appendix W. With updates in 1996 and 1999, the evolution of EPA's

⁴The August 12, 1996 version of "Appendix W to Part 51 -Guideline on Air Quality Models" was the rule in effect for these attainment demonstrations. EPA is proposing updates to this rule which will not be in effect until the new rule is promulgated.

guidance has led us to use both the photochemical grid model, and additional analytical methods approved by EPA.

The modeled attainment test compares model predicted 1-hour daily maximum ozone concentrations in all grid cells for the attainment year to the level of the NAAQS. The results may be interpreted through either of two modeled attainment or exceedance tests: a deterministic test or a statistical test. Under the deterministic test, a predicted concentration above 0.124 parts per million (ppm) ozone indicates that the area is expected to exceed the standard in the attainment year and a prediction at or below 0.124 ppm indicates that the area is expected to not exceed the standard. Under the statistical test, attainment is demonstrated when all predicted (i.e., modeled) 1-hour ozone concentrations inside the modeling domain are at, or below, an acceptable upper limit above the NAAQS permitted under certain conditions (depending on the severity of the episode modeled).

In 1996, EPA issued guidance⁶ to update the 1991 guidance referenced in 40 CFR 50 App. W, to make the modeled attainment test more closely reflect the form of the NAAQS (i.e., the statistical test described above), to consider the area's ozone design value and the meteorological conditions accompanying

⁵ Guidance on the Use Of Modeled Results to Demonstrate Attainment of the Ozone NAAQS. EPA- 454/B-95-007, June 1996.

⁶ Ibid.

observed exceedances, and to allow consideration of other evidence to address uncertainties in the modeling databases and application. When the modeling does not conclusively demonstrate attainment, EPA has concluded that additional analyses may be presented to help determine whether the area will attain the standard. As with other predictive tools, there are inherent uncertainties associated with air quality modeling and its results. The inherent imprecision of the model means that it may be inappropriate to view the specific numerical result of the model as the only determinant of whether the SIP controls are likely to lead to attainment. The EPA's guidance recognizes these limitations, and provides a means for considering other evidence to help assess whether attainment of the NAAQS is likely to be achieved.

The process by which this is done is called a weight of evidence (WOE) determination. Under a WOE determination, the state can rely on, and EPA will consider in addition to the results of the modeled attainment test, other factors such as other modeled output (e.g., changes in the predicted frequency and pervasiveness of 1-hour ozone NAAQS exceedances, and predicted change in the ozone design value); actual observed air quality trends (i.e. analyses of monitored air quality data); estimated emissions trends; and the responsiveness of the model predictions to further controls.

In 1999, EPA issued additional guidance that makes further use of model results for base case and future emission estimates to predict a future design value. This guidance describes the use of an additional component of the WOE determination, which requires, under certain circumstances, additional emission reductions that are or will be approved into the SIP, but that were not included in the modeling analysis, that will further reduce the modeled design value. An area is considered to monitor attainment if each monitor site has air quality observed ozone design values (4th highest daily maximum ozone using the three most recent consecutive years of data) at or below the level of the standard. Therefore, it is appropriate for EPA, when making a determination that a control strategy will provide for attainment, to determine whether or not the model predicted future design value is expected to be at or below the level of the standard. Since the form of the 1-hour NAAOS allows exceedances, it did not seem appropriate for EPA to require the test for attainment to be "no exceedances" in the future model predictions. The method outlined in EPA's 1999 guidance uses the highest measured design value from all sites in the nonattainment

⁷ "Guidance for Improving Weight of Evidence Through Identification of Additional Emission Reductions, Not Modeled." U.S. Environmental Protection Agency, Office of Air Quality Planning and Standards, Emissions, Monitoring, and Analysis Division, Air Quality Modeling Group, Research Triangle Park, NC 27711. November 1999. Web site: http://www.epa.gov/ttn/scram.

area for each of three years.8 The three year "design value" represents the air quality observed during the time period used to predict ozone for the base emissions. This is appropriate because the model is predicting the change in ozone from the base period to the future attainment date. The three yearly design values (highest across the area) are averaged to account for annual fluctuations in meteorology. The result is an estimate of an area's base year design value. The base year design value is multiplied by a ratio of the peak model predicted ozone concentrations in the attainment year (i.e., average of daily maximum concentrations from all days modeled) to the peak model predicted ozone concentrations in the base year (i.e., average of daily maximum concentrations from all days modeled). The result is an attainment year design value based on the relative change in peak model predicted ozone concentrations from the base year to the attainment year. Modeling results also show that emission control strategies designed to reduce areas of peak ozone concentrations generally result in similar ozone reductions in all core areas of the modeling domain, thereby providing some assurance of attainment at all monitors.

 $^{^{8}}$ EPA relies on this averaging only for purposes of determining one component, <u>i.e.</u> -- the amount of additional emission reductions not modeled -- of the WOE determination. The WOE determination, in turn, is intended to be a qualitative assessment of whether additional factors (including the additional emissions reductions not modeled), taken as a whole, indicate that the area is more likely than not to attain.

In the event that the attainment year design value is above the standard, the 1999 guidance identifies a method for identifying additional emission reductions, not modeled, which at a minimum provide an estimated attainment year design value at the level of the standard. This step uses a locally derived factor which assumes a relationship between ozone and the precursors. The Act and the regulations do not mandate nor does EPA guidance suggest that States must model all control measures being implemented. Moreover, a component of this technique - the estimation of future design value - should be considered a model-predicted estimate. Therefore, results from this technique are an extension of "photochemical grid" modeling and are consistent with Section 182(c)(2)(A).

The State provided an array of weight-of-evidence analysis to support the probability of attainment of the NAAQS in November, 2007. These analyses were in accordance with the guidelines and procedures discussed above. Analyses included future design value calculations, design value trends, spatial and temporal modeling metrics, and several other measures not included in the attainment demonstration CAMX modeling. Specifically, the future design value calculations indicated a calculated future design value of 115.4 parts per billion (ppb), below the NAAQS value of 124 ppb. The design values trend analysis demonstrates a general decrease in design values from

1975 through 1999. The spatial and temporal modeling shows an overall 87 percent improvement in ozone exceedance days for the 2007 post-control case as compared to the 1993 base case. In addition, other items in the WOE analysis provided for additional emissions reductions on top of those included in the CAMX modeling.

In addition to the summary discussion provided in the proposed rulemaking notice (65 FR 81797), the weight-of-evidence approach is discussed in more detail in the TSD to the December 27, 2000, notice and the supporting documentation submitted by the State. Also, it must be understood that the WOE analysis is used for additional analyses based on a composite of the information, not on a single element. The State analyzed, and the EPA considered, these analyses in the aggregate in assessing whether the State has provided sufficient evidence that corroborates further the attainment demonstration. It is the EPA's technical opinion the State's analyses of air quality and emission trends do provide additional support for the State's attainment demonstration. Progress in air quality improvement through recent periods is demonstrated and future progress in air quality improvement is shown. In addition, these analyses lend support to a regional NOx reduction as a reasonable approach to achieving attainment of the ozone standard. Based on the weightof-evidence and the modeling, the control strategy should provide for attainment by November 15, 2007.

Comment 18: In addition to the fundamental attainment issues, commenters believe that the emissions reductions strategy contained in the applicable SIP for the BPA area must consider and accommodate disproportionate effects on minority and disadvantaged communities, i.e., environmental justice issues.

Response 18: Commenters' assertion that minority and lowincome populations in Jefferson, Hardin and Orange counties are
exposed to higher levels of ozone that other residents of the BPA
area is not supported by the available data. In addition, the
air quality for the entire BPA area will reflect levels below the
ozone NAAQS once attainment is realized. Moreover, an evaluation
of the available air quality data for the BPA for the years 19982000 indicates that fewer exceedances occurred in areas with
minority and low-income populations than did for areas with
relatively high non-minority and non-low-income populations. EPA
therefore finds that this rulemaking is consistent with Executive
Order 12898 and does not impose any disproportionately high and
adverse human health or environmental effects on minority and
low-income populations.

Commenters also contend that the provisions of 40 C.F.R. §
7.35(a)(3) proscribe EPA's administration of the air quality
program in a discriminatory manner. EPA regulations at 40 C.F.R.
Part 7 implement Title VI of the Civil Rights Act of 1964, as

amended, and prohibit recipients of EPA assistance from discriminating on the basis of race, color or national origin, among other things. Title VI and the Part 7 regulations apply to the programs and activities of recipients of EPA assistance, but not to actions taken by federal agencies. Therefore, the requirements of 40 C.F.R. Part 7 do not apply to the action EPA is taking today. More importantly, as noted above, EPA concludes that this action does not impose any disproportionately high and adverse human health or environmental effects on minority and low-income populations.

Finally, commenters make a number of factual allegations about the demographics and health of poor and minority populations in the BPA nonattainment area and across the country. However, commenters did not provide EPA with any concrete references or resources to support these allegations. Therefore, EPA is not responding to these unsupported factual allegations.

Comment 19: BPA needs Reasonable Further Progress:
Reasonable further progress is not being provided for in the BPA

⁹EPA notes that commenters reference a Title VI administrative complaint regarding the Exxon-Mobil Beaumont refinery-chemical plant complex. The complaint, which is dated April 13, 2000, involves a permitting action by the Texas Natural Resources Conservation Commission. EPA's Office of Civil Rights is responsible for the Agency's administration of Title VI and is still processing this complaint. As a result, the complaint is not germane to the SIP action taken today by EPA pursuant Clean Air Act section 110.

area due to the state's failure to require the CAA minimum 3%-per-year rate-of-progress reductions, even though the statute clearly requires these basic reductions. This failure violates the rate-of-progress requirements in the statute. EPA needs to enforce this requirement of the Act.

Response 19: Since the BPA ozone nonattainment area is classified as a moderate nonattainment area, the State was required to submit as a revision to the SIP a 15% Rate-of-Progress (ROP) plan for the BPA area. CAA Section 182(b)(1). This 15% plan meets the reasonable further progress requirements for a moderate ozone nonattainment area. The 15% plan was submitted and subsequently approved by the EPA. 63 FR 06659, February 10, 1998. The reasonable further progress requirement cited by the commenter (3%-per-year ROP reductions) does not apply to a moderate ozone nonattainment area. The 3%-per-year ROP measure is an additional reasonable further progress requirement for serious and above ozone nonattainment areas, which becomes effective for those areas after the 15% requirement is submitted. CAA Section 182(c)(2)(B). Since, with this rulemaking the EPA is approving the Attainment Demonstration SIP revision, extending the attainment date, and is not reclassifying the BPA ozone nonattainment from its present classification of moderate to serious or above, the additional 3%-per-year ROP component of the reasonable further progress requirements of the

CAA does not apply in the case of the BPA area.

On the other hand, the HG December 2000 SIP revision submission includes the required Post-1999 ROP Plans for the HG area through 2007. Because of the impact of the HG area upon the BPA area's air quality, through transport of ozone and ozone precurser compounds, the fact that the HG area's plan includes the 3% ROP requirements will ensure that the air quality in BPA improves at a steady pace.

Comment 20: Contingency Measures needed if State fails to show Progress: The lack of contingency measures is unacceptable and illegal. The extension for the BPA area requires that the area do nothing if the state fails to show progress, therefore EPA needs to require the state to adopt a set of contingency measures.

Response 20: First, the EPA believes the contingency measure requirements of Section 172(c)(9) are an independent requirement from the attainment demonstration requirements under Section 172(c)(1) and the rate-of-progress (ROP) requirements under Sections 172(c)(2) and 182(b)(1)(A). The contingency measure requirements are to address the event that an area fails to meet a ROP milestone or fails to attain the ozone NAAQS by the attainment date established in the SIP. The contingency measure requirements have no bearing on whether a state has submitted a SIP that projects attainment of the ozone NAAQS or the required

ROP reductions toward attainment. The attainment or ROP SIP provides a demonstration that attainment or ROP requirements ought to be fulfilled, but the contingency measure SIP requirements concern what is to happen only if attainment or ROP is not actually achieved. Therefore, the EPA acknowledges that contingency measures are an independently required SIP revision, but does not believe that submission of contingency measures is generally necessary before EPA may approve an attainment or ROP SIP, or that contingencies submitted previously, and still in effect, need be restated in the attainment demonstration SIP. However, where EPA is granting an attainment date extension, as in BPA, EPA's policy requires that areas meet all of the requirements applicable to the areas' classification. Further, as discussed below, the BPA area has met its ROP contingency measures requirements.

The State of Texas has previously submitted contingency measures applicable to the BPA nonattainment area. These measures were submitted with the 15% ROP SIP revision and approved by EPA. 63 FR 6659, February 10,1998. The State meets the requirements of the CAA for a moderate area's ROP contingency measure submittals. These contingency measures include the triggering of the lower major source threshold for the application of RACT controls for certain source categories. These contingency measures were submitted previously, approved by

EPA, and remain in effect. Therefore, the BPA area meets the ROP requirements applicable to its classification.

Comment 21: HG area may not attain by 2007 due to series of industry-business lawsuits filed January, 2001 opposing the HG SIP: Ability of the BPA area to attain by November 15, 2007 is now threatened by lawsuits in HG to oppose the major stationary source NOx reductions required for the HG area's 2007 attainment. Delays will impact attainment for the BPA area since the state is relying heavily on reductions in the HG area for improving air quality.

Response 21: The commenter is correct in stating there are currently pending lawsuits challenging several rules included in the HG area SIP. They also correctly point out that delays in effective dates of these rules could impact attainment for the BPA area. The lawsuits are pending and final resolutions have not been made. As such, the provisions of the regulations have not been invalidated. For the purpose of this SIP revision approval, the HG area measures necessary for HG to attain the ozone NAAQS levels, preparatory for the BPA area's attainment of the Ozone NAAQS, stand.

Under the consent decree, if EPA has not fully approved an attainment SIP for the HG area, then EPA must, by June 14, 2002, promulgate a FIP.

IX. EPA Action

EPA is taking the following actions on the State submittals of November 12, 1999, and April 25, 2000:

- 1. EPA is approving the ground-level one-hour ozone attainment demonstration SIP for the BPA, Texas ozone nonattainment area.
- 2. EPA is approving the State's request to extend the ozone attainment date for the BPA ozone nonattainment area to November 15, 2007 while retaining the area's current classification as a moderate ozone nonattainment area.
- 3. EPA is approving the on-road motor vehicle emissions budgets.
- 4. EPA finds that the BPA area meets all remaining outstanding VOC RACT requirements for major sources.

The EPA also approves the State's enforceable commitment to conduct a mid-course review (including evaluation of all modeling, inventory data, and other tools and assumptions used to develop this attainment demonstration) and to submit a mid-course

review SIP revision, with recommended mid-course corrective actions, to the EPA by May 1, 2004. If the subsequent analyses conducted by the State as part of the mid-course review indicate additional reductions are needed for BPA to attain the ozone standard, EPA will require the State to implement additional controls as soon as possible until attainment is demonstrated through an approvable attainment demonstration.

X. Administrative Requirements

Under Executive Order 12866 (58 FR 51735, October 4, 1993), this action is not a "significant regulatory action" and therefore is not subject to review by the Office of Management and Budget. This action merely approves state law as meeting federal requirements and imposes no additional requirements beyond those imposed by state law. Accordingly, the Administrator certifies that this rule will not have a significant economic impact on a substantial number of small entities under the Regulatory Flexibility Act (5 U.S.C. 601 et seq.). Because this rule approves pre-existing requirements under state law and does not impose any additional enforceable duty beyond that required by state law, it does not contain any unfunded mandate or significantly or uniquely affect small governments, as described in the Unfunded Mandates Reform Act of

1995 (Public Law 104-4). This rule also does not have a substantial direct effect on one or more Indian tribes, on the relationship between the Federal Government and Indian tribes, or on the distribution of power and responsibilities between the Federal Government and Indian tribes, as specified by Executive Order 13175 (65 FR 67249, November 9, 2000), nor will it have substantial direct effects on the States, on the relationship between the national government and the States, or on the distribution of power and responsibilities among the various levels of government, as specified in Executive Order 13132 (64 FR 43255, August 10, 1999), because it merely approves a state rule implementing a federal standard, and does not alter the relationship or the distribution of power and responsibilities established in the Clean Air Act. This rule also is not subject to Executive Order 13045 (62 FR 19885, April 23, 1997), because it is not economically significant.

In reviewing SIP submissions, EPA's role is to approve state choices, provided that they meet the criteria of the Clean Air Act. In this context, in the absence of a prior existing requirement for the State to use voluntary consensus standards (VCS), EPA has no authority to disapprove a SIP submission for failure to use VCS. It would thus be inconsistent with applicable law for EPA, when it reviews a SIP submission, to use VCS in place of a SIP submission that otherwise satisfies the

provisions of the Clean Air Act. Thus, the requirements of section 12(d) of the National Technology Transfer and Advancement Act of 1995 (15 U.S.C. 272 note) do not apply. As required by section 3 of Executive Order 12988 (61 FR 4729, February 7, 1996), in issuing this rule, EPA has taken the necessary steps to eliminate drafting errors and ambiguity, minimize potential litigation, and provide a clear legal standard for affected conduct. EPA has complied with Executive Order 12630 (53 FR 8859, March 15, 1988) by examining the takings implications of the rule in accordance with the "Attorney General's Supplemental Guidelines for the Evaluation of Risk and Avoidance of Unanticipated Takings" issued under the executive order. This rule does not impose an information collection burden under the provisions of the Paperwork Reduction Act of 1995 (44 U.S.C. 3501 et seq.).

The Congressional Review Act, 5 U.S.C. section 801 et seq., as added by the Small Business Regulatory Enforcement Fairness Act of 1996, generally provides that before a rule may take effect, the agency promulgating the rule must submit a rule report, which includes a copy of the rule, to each House of the Congress and to the Comptroller General of the United States. EPA will submit a report containing this rule and other required information to the U.S. Senate, the U.S. House of Representatives, and the Comptroller General of the United States

prior to publication of the rule in the **Federal Register**. A major rule cannot take effect until 60 days after it is published in the **Federal Register**. This action is not a "major rule" as defined by 5 U.S.C. section 804(2). This rule will be effective [FEDERAL REGISTER OFFICE: insert date 60 days from date of publication of this document in the Federal Register].

Under section 307(b)(1) of the Clean Air Act, petitions for judicial review of this action must be filed in the United States Court of Appeals for the appropriate circuit by [FEDERAL REGISTER OFFICE: insert date 60 days from date of publication of this document in the Federal Register]. Filing a petition for reconsideration by the Administrator of this final rule does not affect the finality of this rule for the purposes of judicial review nor does it extend the time within which a petition for judicial review may be filed, and shall not postpone the effectiveness of such rule or action. This action may not be challenged later in proceedings to enforce its requirements. (See section 307(b)(2).)

List of Subjects in 40 CFR Part 52

Environmental protection, Air pollution control, Hydrocarbons, Intergovernmental relations, Nitrogen Oxides, Ozone, Reporting and recordkeeping requirements.

<u>Authority</u> : 42 U.S.C. 7401 <u>e</u> :	t <u>seq</u> .
Dated:	Gregg A. Cooke,

Regional Administrator,

Region 6.

Part 52, chapter I, title 40 of the Code of Federal Regulations is amended as follows:

PART 52 - [AMENDED]

1. The authority citation for Part 52 continues to read as follows:

Authority: 42 U.S.C. 7401 et seq.

Subpart SS - Texas

2. In Section 52.2270, four entries in the "EPA Approved Nonregulatory Provisions and Quasi-Regulatory Measures in the Texas SIP" table in paragraph (e) are added, after the last listing in the table, to read:

§52.2270 Identification of plan.

* * * * * * (e) * * *

EPA Approved Nonregulatory Provisions and Quasi-Regulatory Measures in the Texas SIP

Name of SIP provision	Applicable geographic or nonattainment area	State submittal/ effective date	EPA approval date	Comments
* * * *	* * *			

Attainment Demonstration for the 1-hour Ozone NAAQS	Beaumont/ Port Arthur, TX	04/19/00	[Insert publication date and Federal Register cite]	
Ozone Attainment Date Extension to 11/15/07	Beaumont/ Port Arthur, TX	04/19/00	[Insert publication date and Federal Register cite]	
Commitment by Texas to perform a mid-course review and submit a SIP revision by 05/01/04	Beaumont/ Port Arthur, TX	04/19/00	[Insert publication date and Federal Register cite]	
Finding that BPA area meets VOC RACT requirements as of [Insert publication date]	Beaumont/ Port Arthur, TX	04/19/00	[Insert publication date and Federal Register cite]	

* * * * *

Billing Code 6560-50-P